A Survey of the Fiscal Policies of the State of Pennsylvania in the Field of Education

A REPORT TO THE CITIZENS' COMMITTEE ON THE FINANCES OF PENNSYLVANIA TO HON. GIFFORD PINCHOT

By

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and

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The Report of The Citizens' Committee on the Finances of Pennsylvania

to

HON. GIFFORD PINCHOT

PART II

Education

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DECEMBER, 1922

Acknowledgments.

The Citizens' Committee on the Finances of the State of Pennsylvania was appointed by Gifford Pinchot, then Republican nominee for Governor of the State of Pennsylvania, for the following purposes:

(1) To secure and consider the best available figures showing the money income of the state from all sources during the current biennial fiscal period to secure and consider the best available figures showing the probable total revenue from all existing sources during the next biennial fiscal period; and to make needful recommendations as to sources of revenue and methods of taxation, with the object of avoiding additional or unnecessary burdens upon the people of the state.

(2) To inquire into the expenditures of all monies appropriated for any purpose by the legislative session of 1921; to consider the necessity for such expenditures; to estimate the probable deficits, where such exist, and to make needful recommendations for the more economical and effective expenditure of the state's funds.

(3) To examine into the present methods of appropriations and expending the money received by the State from all sources; to make recommendations as to the fiscal policies of the state; and to propose a form of budget that will assist in preventing the appropriation of monies in excess of the probable revenue.

The Committee in undertaking its responsibilities early decided that it was advisable to have special surveys made of the spending policies of each of the larger departments through an expert peculiarly qualified in each respective field.

The Committee chose for the experts to make the survey of the fiscal policies of the Department of Education, Dr. Harlan Updegraff, Professor of Educational Administration in the University of Pennsylvania, and Dr. Leroy A. King, Assistant Professor of Educational Administration in the University of Pennsylvania.

Dr. Updegraff is also director of the Bureau of Educational Measurements, and chairman of the general committee in charge of Schoolmen's Week at the University. He has served as the head of both public and private schools and as chief of two different divisions in the United States Bureau of Education. This latter

work brought him into close contact with state and local public school administration in all parts of the United States. Dr. Updegraff is the author of many books and articles dealing with the fiscal phase of Educational Administration. In 1911 he made a study of the expenses of city school systems. He has collaborated on surveys of city school systems in Baltimore, Maryland, in 1911; in Brookline, Massachusetts, in 1917; in the rural schools of Pennsylvania in 1913; and in Philadelphia in 1921. He was employed as director of the financial section of the Rural School Survey of New York State made in 1921. His report is regarded as a noteworthy contribution in the field of educational finances. He has given close attention to the educational finances of Pennsylvania during the past few years and has written a number of important papers concerning them. Dr. Updegraff's national standing in educational matters is indicated by the fact that he is chairman of the Committee on Tenure and the Committee on Participation of Teachers in School Management appointed by the National Educational Association.

Dr. LeRoy A. King is assistant professor of Educational Administration at the University of Pennsylvania and is Assistant Director of the Bureau of Educational Measurements. From 1910 to 1914 he was Professor of Education and Director of the Training School in the Lock Haven State Normal School. From 1914 to 1917 he was Supervising Principal of Public Schools. He is one of the associate editors of the Journal of Rural Education, and is secretary of the General Committee of Schoolmen's Week, held annually at the University of Pennsylvania. He has for many years held various group conferences on educational matters throughout Pennsylvania. The United States Bureau of Education published in 1921 a special monograph by Dr. King on "The Status of the Rural Teacher in Pennsylvania." He has also assisted in the survey of rural schools in New York State and in the Survey of Philadelphia made in 1921.

Inasmuch as there are many important phases of public policy entering into each of these spending policies it was deemed advisable to associate with each of the experts an advisory committee to add their judgments to the matter at hand.

The Advisory Committee on Education comprises the following educators and citizens of the State.

For the Citizens of the State this Committee has appointed Franklin N. Brewer, of Moylan, Pa., President of the Public Education and Child Labor Association of Pennsylvania; Mrs. John O. Miller, of Pittsburgh, President of the Pennsylvania League of Women Voters; Mr. John A. Voll, of Philadelphia, of the Glass Bottle Blowers' Association, and Mr. R. L. Munce, of Washington, Pa., a representative farmer.

For the Higher Educational Institutions, Dr. Henry H. Apple, Lancaster, Pa., President of Franklin and Marshall College; Dr. Samuel Black McCormick, of Pittsburgh, formerly Chancellor of the University of Pittsburgh, and John Franklin Shields, of Philadelphia, Trustee of the Pennsylvania State College, have been appointed.

For the larger cities, Dr. Edwin C. Broome, of Philadelphia, Superintendent of Schools in Philadelphia, and Mr. Robert E. Laramy, of Altoona, Superintendent of the Altoona School District, have been appointed.

For the smaller cities, boroughs and townships, Charles S. Davis, of Steelton, Pa., Superintendent of Steelton Schools; Mr. Carmon Ross, of Doylestown, Pa., Supervising Principal of Doylestown Borough Public Schools; T. T. Allen, of DuBois, Pa., Superintendent of Schools of DuBois, and Edward S. Ling, Superintendent of Schools of Abington Township, Glenside, Pa., have been appointed.

For County Superintendents, Mr. Charles E. Dickey, of Pittsburgh, Pa., Superintendent of Schools of Allegheny County, and Mr. Eli H. Rapp, of Reading, Pa., County Superintendent of Berks County Schools, have been appointed.

For Normal Schools, Dr. John A. H. Keith, Principal of the State Normal School at Indiana, Pa., and for School Boards, Mr. John M. Seasholtz, President of Board of Education, Reading, Pa., have been appointed.

These surveys by experts are made as reports to the Committee and the Committee has immediately released them for publication. The Committee, of course, cannot and does not take credit to itself for either the work or the recommendations. Credit in these matters is due solely to the expert and those who have advised with him.

CLYDE L. KING,
Chairman.

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Preface.

This study was begun September 1, 1922, and has been carried on by the authors while doing their regular university work. They have been generously provided with competent editorial, stenographic and clerical assistants, without whose whole-hearted efforts the work could not have been completed in the brief time allotted. Nevertheless, it has not been possible to inquire into all phases of the various fields designated for study or to harmonize or eliminate minor statistical discrepancies; neither has there been time to secure throughout the best organization of material and the most concise forms of expression. However, the facts presented have been gathered in detail and treated with sufficient care and accuracy to make them a satisfactory basis of judgment. It is believed also that the conclusions drawn therefrom are so stated as to leave no doubt in the mind of the reader as to the authors' meaning.

While both have co-operated in the preparation of the entire study, the chapters on Public Schools, Higher Educational Institutions, State Department of Public Instruction, and Relative Needs have been prepared by Harlan Updegraff, and the chapter on Normal Schools by Leroy A. King.

The authors join in expressing their debt of gratitude to the Chairman of the Citizens' Committee on Finances, to its sub-committee on Education, to the Advisory Committee on Education, to our office staff and to all others who have assisted in the preparation of the study.

THE AUTHORS.

December 9, 1922.

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Summary of Findings and Recommendations.

Public Schools.

1. The machinery for the control and support of public education is in process of development. The tendency has been and still is to place control more in central organs rather than in local organs and in professional officers rather than in lay officers. The tendency in the field of support is for the state to bear a larger proportion of the cost of schools. There are many unsettled problems in both of these fields.

2. Pennsylvania lost ground educationally as compared with other states during the twenty years previous to 1920. Ayres' "Index Numbers for State School Systems" indicates this. The gradual decrease in the amount paid teachers as compared with other states is another proof. Still a third indication is the standing of Pennsylvania school children in the standard tests in school subjects given near the close of this period.

3. The beginning of an upward movement was manifest as early as 1911, but it did not get fully under way until 1920.

4. Pennsylvania was a low cost education state for a period of forty years previous to 1921. The tax rates in rural and city school districts in 1921-22 were about the same as in other states having good educational systems.

5. Elementary school teachers in rural schools last year received salaries that were near or below the average for the United States as a whole except in city schools of the first class, in which group salaries seem to have been higher than the norm. Expenses per pupil in cities in the state of Pennsylvania in 1921-22 were on the whole relatively lower than in other cities of the United States.

6. The per capita income of individuals and corporations in the state of Pennsylvania in 1919 was less than in eighteen other states.

7. The state pays a lower proportion of expenses of schools in local school districts than the average state. An increase in the state appropriation for public schools is justified.

8. The method of distribution under the Edmonds Act is superior to any previous plan followed by the state.

9. Its advantages are:

(a) It increases the length of the school term in fourth-class districts.

(b) It penalizes districts for employing teachers holding low-grade certificates.

(c) It promotes easy budgeting.

(d) It marks a beginning in differentiating payments on the basis of valuations.

10. Its disadvantages are:

(a) Wealthy districts within each class of district receive too large an amount per teacher and poor districts too small an amount.

(b) The grants to the second and third class districts should not be the same.

(c) It fails to stimulate local districts to do their best and to penalize them when they have lowered their tax rates.

(d) The number of forms of Special Aid are too limited.

(e) It does not cover increments of salary above initial salaries.

11. Minor modifications in the Edmonds Act are suggested as follows *in case the major modifications suggested below are not made:*

(a) Establishment of a state-wide minimum salary schedule in fourth class districts, over an eight-year period.

(b) Extending the schedule already fixed for third class districts so that all districts should have an eight-year schedule.

(c) Have state aid cover increments above initial salaries.

12. Major modifications should be made in the Edmonds Act to stop inefficient use of money involved in giving wealthy districts within each class of district as much per teacher as poor districts and those which levy a low tax as much as those that levy a high tax. Such an amendment to the Edmonds Act should be put into effect at the earliest time that it can be done without lowering the standards relative to teachers' salaries and teachers' qualifications.

13. The amount of aid per teacher to be given any district should be in inverse proportion to its ability to support schools

as shown by its true valuation per teacher and in direct proportion to the effort it makes to support schools as shown by its true tax rates. This is called the "Ability and Effort Plan."

14. The true valuation of property taxable for schools must be ascertained in order to put into effect the "Ability and Effort Plan." To determine the rates of assessment used by local assessors, the establishment of a State Tax Commission or a Revenue Commissioner is recommended.

15. In the event that neither of these offices is created the rates of assessment reported by secretaries of school boards to the State Superintendent of Public Instruction may be used. These reports are reliable in 75 percent of the cases and the distribution under such a plan, though imperfect, would be more effective in promoting efficiency in local schools than the existing method.

16. This "Ability and Effort Plan" makes it possible for all districts having a valuation below the established standard true valuation per teacher ($185,000) to have equally good schools by the levying of the same tax rate. The proportion that any district receives varies directly with the deficiency in its valuation below the established standard valuation.

17. Under the "Ability and Effort Plan" a district of any given true valuation will always receive the same proportion of its total expenses for schools so long as its tax rate does not exceed the maximum for which aid is granted. Thus as the district puts more into its schools the grant from the state increases up to the standard maximum limit.

18. The wealthier districts should be given only nominal grants except when the expenses exceed the average standard fixed by regulation.

19. Although this "Ability and Effort Plan" is considered the most equitable for General Aid and should therefore alone be used, it can be combined with other plans if necessary.

20. The chief object of state aid should now be to bring about an advance in the schools of rural districts similar to that which has occurred in city districts during the past two years.

21. The estimated cost of the plan herein proposed is less than the estimate of grants under the present plan for the coming fiscal year.

22. New forms of Special Aid should be introduced, encouraging:

(a) Enlargement of high schools in poor districts,

(b) Erection of school houses and teacherages in poorer districts,

(c) Purchase of transportation equipment in poorer districts,

(d) Use of transportation,

(e) Teachers to teach in outlying schools,

(f) Abandonment of buildings in rural districts,

(g) Employment of supervisors in rural districts.

23. A reorganization of local school districts would contribute in a marked way to the more economical use of public money. Many schools are now improperly located, some have too many pupils, others too few. High school facilities are difficult to secure. A complete redistribution of territory into new school districts is necessary to the solution of many of the problems involved.

24. The present method of estimating the amount of high school tuition to be paid one district by another should be changed and based upon actual expenses of every kind and not for instruction alone. The present law should be so altered as to permit districts to contract with each other upon any terms that may be satisfactory to both.

25. The sources from which the permanent state school fund, established by the Act of 1911, are increased should be extended.

26. A *Commission* should be appointed to consider the ways of eliminating wastes in the conduct of public schools. Such a commission should include experts in the various fields of school management and citizens.

27. The state auditor and treasurer should be authorized to borrow from separate funds in the State Treasury to pay grants to public schools on time.

Normal Schools.

28. The Pennsylvania Normal Schools with the exception of three or four have smaller enrollments than Normal Schools over the country; however, the number of Normal School graduates is relatively large.

29. The Pennsylvania Normal Schools have generally a larger proportion of their students enrolled in secondary departments than most Normal Schools.

30. The summer sessions are unusually well attended and render a great service to the state by training teachers who are in service.

31. The Extension Departments in eleven of the schools show a phenomenal enrollment, considering that this work was only begun in September, 1921.

32. The Correspondence courses, for teachers in service who cannot attend Extension classes, are in the process of development.

33. The average number of students per teacher is 15.1, which is slightly above the average of the other schools studied except those of Wisconsin.

34. The average number of pupils in the training school is 543, showing an average of four per graduate in 1921, which is lower than three of the five standard groups.

35. The expenditures of the several schools vary greatly in gross amounts and also in the amounts spent under the various headings of the classification of accounts, based on the average for all of the Pennsylvania Normal Schools, and also on the standards obtained from the country at large.

36. Similar variations exist in the expenditures for the Training Departments which are due to the varied systems used in the several Normal Schools.

37. Practically all of the Pennsylvania Normal Schools show a surplus of receipts over expenditures in their Housing Departments (dormitory, dining hall and laundry) for 1921. The cost of housing at some of the schools is so low that the question arises whether these schools are not sacrificing comfortable living conditions. It should be borne in mind, however, that some of the schools, on account of limited allotments of state funds, are obliged to transfer a surplus from housing to the educational budget.

38. There is a wide variation in the average salaries of the teachers among the different schools from the standpoints of median salary and of salary per student enrolled.

39. The allotment of state appropriations to the different schools varies greatly in the percentage of total expenses or receipts and from the standpoint of per student enrolled.

40. The Pennsylvania Normal Schools do not train enough teachers for the urban schools or for the rural schools. The enrollment for 1922-23 is more than 25 percent greater than for 1921-22, and it is probable that the larger number of Normal School graduates in 1922-23 will no more than meet the needs in the cities and boroughs.

41. Financial conditions in Pennsylvania Normal Schools have improved greatly during the past year or two in line with the marked progress of the Normal Schools in all educational aspects. Much of the credit for this improvement is due to the State Department of Public Instruction. The Administration Bureau of the State Department of Public Instruction introduced an excellent accounting system which has been most valuable in this study. There have undoubtedly been some errors in the classification of receipts and expenditures, but when the final statements of the several schools in the office of the State Superintendent were checked by the corresponding statements of the Auditor-General's office, the two were found to be in substantial agreement. The financial report of the Normal Schools prior to 1921-22 was organized on a basis so different from the present one that comparisons with former years were practically impossible. The present Normal School administration is moving in the right direction. The wide variations in expenses and state allotments mentioned throughout this study indicate that there are desirable financial results yet to be achieved.

42. In view of the great variations in expenses among the Normal Schools under the various headings, it is recommended that a greater amount of standardization be established by the State Department in order to give a more equitable distribution of the state appropriation for Normal Schools. Such standardization should be based on an extended study of the Normal School system in regard to *size, need, efficiency,* and *service to the State.*

43. A larger appropriation for current expense should be made for the Normal Schools of Pennsylvania as now constituted.

44. A portion of the appropriation should be definitely set aside for extension work that will benefit especially the non-self-supporting extension center and for the summer session, agencies especially devoted to the training of teachers in service.

45. A more definite relationship should be established between the state authorities and the Local Boards of Trustees in order to insure definite responsibility especially relative to financial matters.

46. Since the housing accounts at the several Normal Schools are relatively large, and since there are fluctuations in wages and prices, it is desirable that all of those responsible for the administration of the State Normal Schools, *viz.*: Superintendent of Public Instruction, State Council of Education, and thirteen Boards of Trustees and the thirteen principals—should establish a definite policy relative to a standard of comfort, charges per student, the disposition of any surplus that may arise, and the creation of a reserve or contingent fund, thus safeguarding the financial interest which the Commonwealth has because of its ownership.

47. A more efficient administration would be promoted by such a reorganization of control that would place the responsibility for the distribution and use of state funds on a *central lay board* or the *State Council of Education.* Such a board should, through its expert agents, exercise supervision over the business administration of the local boards and the principals so as to promote on the one hand the proper expansion of each school and on the other hand a wise economy in expenditures through the introduction of better business methods and more careful purchasing. The Superintendent of Public Instruction should be the secretary and chief executive officer of such a board and the agents of the board should work under his direction.

48. A Normal School *Commission* should be appointed by the Governor with the State Superintendent of Public Instruction, ex-officio member, to make a more extended study of the normal schools as to (a) the best form of board suggested above under paragraph 47, (b) providing better service to the state, as an agency for the training of public school teachers, (c) the organization of additional normal schools in cities to train teachers primarily to supply needs of cities and boroughs, (d) the advisability of closing or relocating some existing normal schools, and (e) the advisability and feasibility of enlarging the scope of the work of certain normal schools.

Higher Educational Institutions.

49. Pennsylvania has complied with the mandates of its earlier constitutions relative to universities and seminaries by chartering private corporations in which it has exercised some control and to which it has granted some support.

50. No higher educational institution in the Commonwealth may be said to be a state institution in the strictest sense of that term, although there are three, the University of Pennsylvania, the University of Pittsburgh and the Pennsylvania State College, which because of their connections with the state have been generally regarded as semi-public institutions. Pennsylvania State College more nearly satisfies the conditions requisite for being a strictly state institution than either of the other two.

51. The population of Pennsylvania and the number of high school graduates each year requires three state institutions of higher learning.

52. The location of each of these three institutions—University of Pennsylvania, University of Pittsburgh and Pennsylvania State College—presents peculiar advantages for certain fields of instruction, all of which should be utilized.

53. The percent of income from student fees in the two universities is considerably above the desired standard of 50 percent, while the incomes from endowment and gifts are considerably lower than they should be. This means that private effort has failed to do its full share and that the State has made up the differences. The student fees of Pennsylvania State College constitute from one-fourth to one-fifth of the total income. This large proportion is caused by the failure of appropriations to meet the increased costs of higher education.

54. The equipment and the salaries of the personnel of all three of the Pennsylvania institutions are not of as high standard relatively as they were a number of years ago. This is because of the considerable growth in the development of universities and of land grant colleges in other states. Pennsylvania is going through the same lagging behind with regard to higher education that she has passed through during the past twenty years in the fields of elementary and secondary education.

55. The finances in all three of the higher educational institutions of Pennsylvania seem to have been economically administered.

56. The income from endowment and appropriations of the state universities in the West and of the private universities in the East have so increased that if these two Pennsylvania universities are to be conducted in the future upon the basis of private support, it is necessary that their endowments be increased up to $40,000,000 or $50,000,000 each, and that considerable enlargement, improvement and extension be made in their equipment.

57. All three of these institutions turned away students last year because of lack of accommodations.

58. While all three institutions have free scholarships, they are limited in number. Most of those granted are based upon a competitive examination. It is thus impossible for many promising youths of Pennsylvania of inadequate means to obtain free tuition in institutions of higher learning. While senatorial scholarships make it possible for a few students to obtain this benefit, it is unfortunate that the benefit is obtained through political influence.

59. The century old plan of providing higher education through private institutions is seemingly reaching the breaking point.

60. It is incumbent upon the state to find ways in which more distinctly state institutions may be secured either (1) by greatly increasing appropriations to the Boards of Trustees of the three institutions under such an arrangement as will guarantee that the appropriations will be spent so as to satisfy most efficiently the needs of the state or (2) by making suitable arrangement with the Boards of Trustees of other private institutions for the accomplishment of the same purpose or (3) by the establishment of new institutions entirely under state support and control.

61. Pennsylvania State College can readily become a purely state institution and should become such.

62. It is still uncertain whether private funds can come to the University of Pennsylvania and the University of Pittsburgh in such abundance as to enable them to maintain the position in the education of the state and the nation that rightfully belong to them. Failing in this the Board of Trustees of each should enter into such an arrangement with the state as would secure, on the one hand, the needed increase in plant, equipment and income and, on the other hand, as would guarantee to the state that the money

so given will be spent in ways which will most contribute to the advancement of its welfare.

63. The present method of making appropriations to the Universities is not altogether favorable. They hesitate to incur any obligation extending beyond the term of the appropriation because of the fear that it may not be renewed.

64. Until this question relative to the two universities is decided, it would seem desirable that all appropriations made to them as well as to Pennsylvania State College should be placed under the control of a central state board without disturbing the present boards in charge of these institutions. Such boards should seek to avoid all financial duplication in work and to foster the development of those departments for which each institution is best suited.

65. As a beginning in the development of such a board it is recommended that the appropriations for Schools of Education in each of these institutions be placed under its control and that it have the authority to approve budgets and rules and regulations proposed by each institution. Extension courses might likewise be placed under the control of this board in order to eliminate duplication and to maintain standards for admission to the courses given and for credit received.

66. Such a board should work in the closest co-operation with the State Department of Public Instruction, and services of the members of the State Department and of the Schools of Education should be exchanged. The State Superintendent of Public Instruction should serve as secretary and executive officer of the board of higher education.

67. Comparative data relative to appropriations for costs of higher education both in the universities and land grant colleges show that the state would be warranted in granting considerable increases to each of the two institutions under the administration of such a board and likewise to Pennsylvania State College, but not to the same degree. This is due to the fact that the state has heretofore supported State College more adequately than the other two institutions.

68. A *Commission* should be appointed to study the higher educational institutions of the state with a view of determining which should be supported by the state, the departments in each that should be supported by the state, the ways to avoid unwar-

ranted duplication of work, the best form of central board, the relation of such a board to the board in charge of each institution, the relation of the central boards to other central educational governmental agencies and similar questions.

State Department of Public Instruction.

69. The State Departments of Public Instruction of other states increased their personnel more rapidly than did that of Pennsylvania during the fifteen years preceding 1920.

70. The number of staff officers now in the State Department of Public Instruction in Pennsylvania in proportion to the number of pupils enrolled in the public schools is near the norm for eleven representative states.

71. While the salaries paid these staff officers are higher than in other states, they are no higher than was necessary to secure the services of the individuals employed. The fact that these officers are not permitted to take fees for services in Pennsylvania or to accept contracts for writing books should be taken into account in this connection. Also the fact that in other states the salaries are frequently fixed by statute and are lower than they should be in order to secure persons of the highest efficiency.

72. Salaries are no higher than are necessary to secure and hold men and women of high qualifications. Twelve percent of the staff have left to accept positions elsewhere under conditions that would give them larger financial returns than in the State Department of Public Instruction.

73. The expenses of the Department per pupil enrolled in the state and the per capita of population in the state are not quite so high as the norm furnished by eleven representative northern states.

74. The Bureaus have been, on the whole, conducted in an efficient manner. It is believed that the data presented relative to the number of schools visited, conferences held, addresses given, letters written, syllabi prepared, hours per day spent at work, etc., when considered in connection with the high qualifications of the staff clearly indicate that the state has gotten full return for the money expended.

75. Certain of the Bureaus are able to show their actual savings of money to school districts or of increased amounts of education

furnished to and received by school children of the state to such an extent as to warrant the maintenance of the Department upon the present scale of efficiency.

76. Interchange of services of specialists in the Department of Public Instruction and the members of the faculty of the Schools of Education and normal schools should be fostered in order that both the work of the department and of the educational institutions may be made the more efficient.

77. The question of appropriations for vocational education should be carefully considered inasmuch as this branch of education seems to be well established in the public's esteem.

78. It is recommended also that careful consideration be given to the development of the work in Americanization in order that better results may be obtained for the money expended.

79. The State Superintendent of Public Instruction should so co-ordinate the expenditures in all of the various classes of schools—universities, colleges, normal schools, high and elementary schools—as to make it possible for each to render the greatest service to all the others. This may be accomplished if he is made the secretary and executive officer of the various lay boards which control the various appropriations to each of the various classes of schools.

Relative Needs.

80. The total appropriations for all educational purposes for the biennium 1921-23 amounted to $37,834,316, two and one-fourth times as much as for the biennium 1909-11.

81. The appropriations for all other purposes increased in the same proportion.

82. Thirty-two percent of the total appropriation for 1921-23 were for education. The norm for all the states was 37.5 percent in 1919. Pennsylvania as judged by the standard would then be warranted in devoting a larger proportion of the state appropriation to education than at present.

83. Sixty-five percent of the appropriation is for state aid to local public schools. This is 20 percent less than in 1909-11.

84. Normal schools, colleges and universities each receive 13 percent of the total, a little more than double in each case the percentage of 1909-11.

85. Equal percentage (2.4) goes to the Department of Public Instruction and to county administration, 350 percent and 170 percent respectively of what they were in 1909-11.

86. The present appropriation for the Department of Public Instruction is not excessive when compared with expense of other state offices.

87. Pennsylvania is no longer the state that gives the largest grants to public schools. Three states make larger grants, two of which have less population than Pennsylvania.

Six states granted larger appropriations in 1919-20 to normal schools, five of which have less population than Pennsylvania.

Eight states made larger appropriations for universities and colleges in 1919–20, all of which have less population than Pennsylvania. The appropriation of three other states were within $75,000 less.

88. The combined appropriation for higher education in Michigan, Wisconsin and Minnesota, which states together have approximately as many people as Pennsylvania alone, was four times that of Pennsylvania.

89. Measuring the appropriations for 1919-21 on the basis of per capita of population, Pennsylvania is slightly below the norm for public schools, about one-half of the norm for normal schools and about four-tenths of the norm for universities and colleges. The appropriation for 1921-23 while higher, probably did not go above the norm in any case except possibly in normal schools, and did not approach the norm in the case of universities and colleges.

90. Measuring the appropriations for 1921-23 upon the basis of income per inhabitant, Pennsylvania's appropriation for public schools was about three-fourths the norm, for normal schools about one-third greater than the norm, and for colleges and universities about four-ninths of the norm.

91. On the whole Pennsylvania's appropriation as measured by per capita costs and income for 1921-23 is near the standard formed by all the states in the case of public schools and normal schools, but is still considerably below in the case of higher educational institutions.

CHAPTER I.

General Introduction.

For a century or more Pennsylvania has, in common with the other states of the Union, been gradually building up a system of public education.

At the critical stages in its development certain questions have been pretty well settled by the votes of the people or by the Legislature. It is no longer questioned that public education shall be universal, that it shall be free to all and that it shall be supported by all, and that it shall be controlled by all. It is not so clearly established, however, just how much of the children's time should be placed at the disposal of the State in order for them to secure the benefits of public education, nor whether universal free education supported by all and controlled by all shall extend to schools of college and university grade, nor how much control the State should exercise over private educational institutions.

But the unsettled questions are not confined solely to these more general aspects of public education. There are many questions having to do with the conduct of the schools regarding which there are differences of opinion. These questions have to do both with the control and the financial support of the public schools. Most of the questions in which differences of opinion arise in each of these two fields may be classified under one of the two following heads:

1. *Whether the authority should be exercised and the support furnished by the state or by local school districts.*

2. *Whether the function should be performed (a) by a legislative agency such as the Legislature, State Board of Education or Local School Board (usually laymen), or (b) by an Executive Officer (usually an educational expert) such as the State Superintendent, County Superintendent, District Superintendent or Supervising Principal.*

The tendencies have been manifest not only in Pennsylvania but in all of the other states of the Union, (1) to take away from local school boards the very wide discretion originally granted

them at the first establishment of the state's public school system, (2) to place a larger share of the management, as well as the expense of conducting the schools, upon the state government, and (3) to increase the power and extend the duties of state and local executive officers at the expense of the lay citizens holding office on local boards. These tendencies have been persistent and have been observed in most of the states of the Union without many backward steps. These withdrawals of authority were made in all cases by acts of the Legislature, elected by the people and in accordance with the state constitution as framed by the people and had as their purpose the improvement of the efficiency of the schools.

These transfers may be divided into four different classes:

1. Those in which the Legislature assumed the power of acting upon matters formerly decided by the local school boards. As an example of this may be mentioned (a) the requirement that music shall be a part of the course of study in all the public schools of the state; (b) the fixing of the minimum salary to be paid to the teachers.
2. Those which authorized the State Superintendent of Public Instruction to exercise certain authority over the conduct of local schools, as for example in the condemnation of school buildings passed in 1911 and in the requirement that he should enforce in the local school districts the provisions of the Compulsory Education Act passed in 1911.
3. Those which authorized the State Board of Education to pass supplementary legislation, as in the finding of the requirements for teachers' certificates.
4. Those which gave the local superintendent the authority and the right to exercise functions performed by the local board as in the recommendation of text-books to be adopted by the schools, and in the first class districts, in the nomination of persons to fill certain positions.

These transfers of authority and responsibility have usually been brought about by some such process as follows:

One or more progressive school districts desired to incorporate into the schools some new feature. If there was no authority in the state law to do this, permissive legislation was sought and usually secured, inasmuch as no compulsion was exercised upon other districts. Soon thereafter, if the project was considered worthy of general adoption, the state

granted Special Aid in order to stimulate other districts to adopt it. As time went on a sufficient number of districts incorporated this new feature until it was considered of sufficient importance to be required in all of the schools within a certain group of districts. Efforts were then made by the friends of public education to secure the passage of an act of the Legislature compelling certain classes of districts, or all districts, to bring their schools up to the new standards. All of the districts in the state covered by the Act were then supposed to observe the law. Frequently the State Superintendent was authorized or required to withhold the state subsidy from such districts as did not comply with the law.

At this point one of the peculiarities of our form of government manifested itself. As a matter of fact some local districts did not observe the Act and there was no effective provision in our form of government to secure its enforcement. This was due to the fact that we do not have a centralized executive system composed of officers located at the State Capitol and in districts throughout the state to compel the local executive or local boards to comply with the legislation as passed. Variable compliance and non-compliance in different districts with the provision of state law in matters pertaining to education has been one of the noticeable characteristics of the public school system of Pennsylvania.

Our school legislation has been centralized, but our execution of the laws has been left largely in its decentralized form.

Throughout the entire procedure these efforts toward efficiency may seem to have been in conflict with the forces of local control. People have been opposed to giving up the expression of their will to the central Legislature or to the State Board of Education as to what their local schools should be. They have likewise opposed the granting of authority to state officers either directly or indirectly and have opposed the enforcement, in their own particular communities, of certain laws which have been passed by the State Legislature. They have, however, welcomed state support but at the same time have not wished to observe the standards required in order to receive it.

The situation in Pennsylvania is still in process of change. The solution involves a number of unsettled questions which are of great importance not only to schools but to the state and to society as a whole. Is the individual to be encouraged in the exercise of his own independent thinking in his participation in government? In the case of a community that is overwhelmingly opposed

to a particular Act of the Legislature, to what extent is it to be allowed not to comply with that legislation? Should it become a principle of action that a particular practice in connection with schools should be observed with a certain percentage of the school districts of the state under permissive legislation, before a mandatory act of the Legislature makes it compulsory in all of the districts? Which is the better plan in order to secure enforcement of educational acts: (a) To educate local communities as to the wisdom of the state law or (b) to compel them to observe it? Does a measure which promotes the efficiency of the schools, likewise by virtue of that fact promote the well being of the state? Is it the function of the public school system not only to educate the children but also to promote greater intelligence in citizenship among the voters? How can the layman be brought to a more intelligent appreciation of the views of the expert in making his decisions upon education and other public questions?

Certain of these and similar questions will be discussed in connection with the treatment of the data relative to the present educational situation in Pennsylvania. It would seem that the solution of the present problems should be made in such a way as to promote the highest well-being to the state in the long run, and not the interest of the schools alone nor of any particular community alone, but according to the best interests of all people of the state in all of their activities.

CHAPTER II.

Public Schools.

Situation in Pennsylvania During Second Decade of 20th Century, 1910-20.

Relative Position of Pennsylvania Schools.—A study of the educational statistics of the various states in the Union during the past thirty years points to the conclusion that Pennsylvania has, during this time, gradually lost ground as compared with the other states in the development of her schools. In proof of this Pennsylvania's rank among the states of the Union in a number of important items on which data are available is shown in Table 1.

TABLE 1.

PENNSYLVANIA'S RANK AMONG THE STATES OF THE UNION IN CERTAIN IMPORTANT ITEMS FOR SPECIFIED YEARS.[1]

Years	Percent of school population attending school daily	Average days attended by each child of school age	Average number of days schools were kept open	Percent that high school attendance was of total attendance
1890.....	3	7	14	25
1900.....	28	18	9	26
1910.....	23	19	18	28
1918.....	24	21	10	29

[1]This Table is adapted from Ayres' "An Index Number for State School Systems." Pages 31, 33, 35 and 49.

Salaries of Teachers.—The state was also falling greatly behind the others in the average salaries paid teachers during this period. Table 2 taken from Updegraff's Brief submitted to the Commission on Constitutional Amendment and Revision of the Commonwealth of Pennsylvania, 1920 (No. 32), shows that while salaries did increase over the 28 year period, nevertheless the salaries were lower during the entire time than in the United States as a whole, and that the percent of difference greatly increased until in 1916 the average monthly amount paid to men teachers in Pennsylvania was 24.3 percent less than in the United States as a whole, while the average paid women was 32.3 percent less.

TABLE 2.

AVERAGE SALARIES OF TEACHERS IN UNITED STATES AND IN PENNSYLVANIA AS GIVEN IN REPORTS OF UNITED STATES COMMISSIONER OF EDUCATION FOR YEARS INDICATED.[1]

Year	MEN				WOMEN			
	United States	Pennsylvania	Difference		United States	Pennsylvania	Difference	
			Dollars	Percent			Dollars	Percent
1888...	$41.75	$38.54	3.21	8.3	$34.21	$30.16	4.05	13.4
1893...	46.39	43.94	2.45	5.6	38.46	33.04	5.42	16.4
1903...	49.98	44.82	5.16	11.5	40.51	34.11	6.40	18.8
1913...	78.29	65.82	12.47	18.9	61.31	48.69	12.62	28.0
1915...	82.35	68.43	13.92	20.3	64.72	50.14	14.58	29.1
1916..	85.36	68.63	16.73	24.3	66.88	50.55	16.33	32.3

[1]Commission on Constitutional Amendment and Revision—Memoranda and Briefs No. 32, April 7, 1920. Page 14.

The nation-wide study made of teachers' salaries for the year 1913 by the National Education Association shows that the salaries of teachers in cities in Pennsylvania were smaller than the standards for cities of the same size in the United States as a whole and that they were much lower than in New Jersey and New York and somewhat lower than in the State of Ohio. Salaries of superintendents both in large and small cities were likewise low, only nine or ten states paying lower amounts.* During this time Pennsylvania was a favorite hunting-ground for superintendents of other states for securing superior teachers. Even the best graduates of some of the normal schools were going directly from graduation to New Jersey and New York, notwithstanding the fact that the state of Pennsylvania had given them their teacher preparation. One reason why it was difficult to secure experienced teachers was the very prevalent custom of continuing experienced teachers on at the same salary year after year and of not granting superior teachers higher salaries than those of inferior ability.

Qualifications of Teachers.—Regarding the qualifications of teachers in the state the following data are available for teachers

*See Updegraff in Schoolmen's Week Proceedings University of Pennsylvania—1916, pp. 43-67, and 1918, pp. 61-65.

in rural schools for the year 1918.† Twenty-three percent of the teachers in schools under county superintendent's supervision (including borough and rural) were new teachers without experience, only 31 percent had normal school training and but 5 percent were college graduates. In the one-teacher rural schools 39 percent of the teachers had never attended a high school; 32 percent were without experience; but 39 percent of them had been teaching in the same position in the previous year and only 15 percent were normal school graduates. In the cities of the state during the same year only about 37 percent had normal school training and 11 percent were college graduates; 52 percent held certificates not requiring such high standards known as permanent, professional and provisional certificates. This combination of low salaries, meagre preparation and little experience would naturally produce poor teaching.

Relative Standing of Pennsylvania School Children.—The results of giving the standard tests in school subjects in boroughs and in city school systems by the University of Pennsylvania and the University of Pittsburgh during the years 1918, 1919 and 1920 furnish data which throws direct light upon this point. Tables 3, 4 and 5 for fundamental operations in arithmetic, silent reading and reasoning in arithmetic show that the children in the schools of Pennsylvania did not, on the whole, display so good ability as children in corresponding schools in other states. Although these are the scores of the first tests for Pennsylvania children, whereas some of the scores from outside the state were those of second or third tests; nevertheless, after making due allowances for this difference it seems clear that all of the facts in these previous paragraphs—low rank as to efficiency, low scores, low standing of pupils—go to establish the fact that the public schools in the state of Pennsylvania did not, during the decade, rank favorably as compared with public schools in other states, more particularly those located in the northern and the western parts of the United States.

†Taken from King's "Status of the Rural Teacher in Pennsylvania, United States Bulletin—1921, No. 34."

TABLE 3.

STATE, GENERAL AND STANDARD SCORES, COURTIS ARITHMETIC TEST, MARCH, 1918.[1]

MEDIANS	ADDITION		SUBTRACTION		MULTIPLICATION		DIVISION	
	Rate	Acc.	Rate	Acc.	Rate	Acc.	Rate	Acc.
Sixth Grade								
Pennsylvania Medians	7.0	65	7.8	81	7.6	78	5.2	77
Kansas Medians	6.9	65	8.8	82	8.1	74	6.4	82
Indiana Medians	8.3	64	8.7	77	7.5	68	6.1	79
Iowa Medians	8.5	67	9.7	83	8.6	76	7.0	83
Minnesota Medians	7.7	62	8.4	76	7.6	71	5.6	78
General Mediana	9.8	73	10.3	85	9.1	78	8.2	87
Courtis Medians	10	100	11	100	9	100	8	100
Eighth Grade								
Pennsylvania Medians	8.7	75	10.6	83	10.0	82	8.1	89
Kansas Medians	9.8	78	11.7	85	10.2	81	9.8	88
Indiana Medians	9.5	67	10.9	82	9.9	74	9.7	87
Iowa Medians	10.0	72	12.0	86	11.5	81	10.8	91
Minnesota Medians	9.2	69	11.2	86	10.7	81	8.6	89
General Median	11.6	76	12.9	87	11.5	81	10.7	91
Courtis Median	12	100	13	100	11	100	11	100

[1]Schoolmen's Week Proceedings 1918, Pages 106-107.

TABLE 4.

PENNSYLVANIA MEDIANS, MONROE SILENT READING TESTS, APRIL, 1919.[2]

MEDIANS	Sixth Grade		Eighth Grade	
	Rate	Comprehension	Rate	Comprehension
Pennsylvania, March	84	17.2	90	22.8
Monroe Standard, May	92	21.0	108	27.5

[2]Schoolmen's Week Proceedings 1919, Page 103.

TABLE 5.

PENNSYLVANIA MEDIANS, MONROE REASONING TESTS, FEBRUARY, 1920.[3]

MEDIANS	Sixth Grade		Eighth Grade	
	Correct Principle	Correct Answer	Correct Principle	Correct Answer
Pennsylvania, February 1920	13.8	9.9	18.7	9.2
Monroe June Standard (Tentative)	15.5	10.2	16.8	8.4

[3]Schoolmen's Week Proceedings 1920, Page 135.

Beginnings of Upward Movement.—Thus while this decade marked a low ebb for educational affairs in the state of Pennsylvania, there were at the same time certain influences working in the direction of the up-building of the schools. Among those were the passage of the School Code of 1911 under the administration of Governor Stuart which gradually introduced reforms in our

school administration. The annual conferences of teachers held by the Pennsylvania State Education Association, the University of Pittsburgh, the University of Pennsylvania, and later by the State Superintendent of Public Instruction, which were largely attended by the school people of the state, gave information regarding the educational conditions in the state and in the United States as a whole and suggested means for improving educational conditions throughout the state. The facts revealed regarding the illiteracy among the Pennsylvania boys who were drafted into the army carried the lesson to the people of the state generally. In addition to this was the granting of votes to women through an amendment to the United States Constitution, which immediately stimulated interest in the subject of education among all citizens. Teachers and citizens alike became more active in improving conditions throughout the state.

Woodruff Act—Edmonds Act.—All of these factors brought about the passage of the Woodruff Act in 1919. The appointment of Thomas E. Finegan as Superintendent of Public Instruction later in the same year introduced a vigorous leader; while the passage, under his leadership, of the Edmonds Act and other bills for the improvement of educational conditions introduced a number of important changes in the Legislature of 1921. These Acts, taken together with the large expansion in the office of the State Superintendent of Public Instruction and the more vigorous enforcement by the State Superintendent of laws, most of which had been upon the statute books for a number of years, but not enforced, and the greater activity of his office in its efforts to encourage the voluntary introduction of new measures on the part of Local Boards of Education in order to increase the efficiency of their schools have produced a new regime in education in this state. Naturally the opposition referred to earlier in this study which seems to exist between efficiency and local control was kindled afresh.

Purpose of This Study.—It is the function of this study to endeavor to evaluate the present situation, particularly from the standpoint of financial support of the schools. This is a practical question of immediate importance by reason of the fact that apparently the income of the state is not adequate to meet the demands that are made upon it under the existing law. A con-

siderable proportion—26 percent—of the state income at the present time is going to the support of the elementary and secondary schools controlled by the local school districts and to the support of the normal schools and higher educational institutions. Should this support be continued in its present form and extent? If not, what modifications are desirable? These are the fundamental questions to be answered by this study. Collateral questions relative to control will naturally arise and they will be dealt with in their proper place, but only in so far as it is necessary in order to answer these major questions.

The Wisdom of the Financial Policy Embodied in the Edmonds Act.

The Edmonds Act, together with its predecessor, the Woodruff Act, caused a considerable increase in the cost of public schools of the state. In order to pass upon the question whether this increased cost is warranted it is necessary to examine several different sorts of material. Let us take, in the first place, the cost of education in Pennsylvania during the preceding years as compared with the cost of public education in the United States. Table 6 (see page 25) furnishes the data relative to the cost per capita of average daily attendance for the United States as a whole for three different groups of states and for seven individual states scattered throughout the country. It will be seen from this table, and from Diagram 1 (page 26) which illustrates it, that the cost for the year 1919-20 per child attending was lower in Pennsylvania than in the United States as a whole, and was also lower than in any of the groups of states and in any of the individual states. The state has occupied this low position ever since 1880. Pennsylvania has been a low-cost education state for a period of forty years. This fact goes to show, since people usually get about the worth of their money in education as in other commodities, that it was desirable in Pennsylvania to increase the cost of education in order to obtain more efficient schools.

TABLE 6.

Expenses per Capita of Average Attendance.[1]

STATES	'70-'71	'79-'80	'89-'90	'99-'00	'09-'10	'11-'12	'13-'14	'15-'16	'17-'18	'19-'20
Pennsylvania	.....	$10.80	$14.92	$20.25	$30.80	$40.09	$46.71	$50.88	$47.57	$51.76
United States	.....	11.87	13.99	16.67	27.85	36.30	39.04	41.72	41.45	54.65
N. A. States	.....	14.75	18.25	24.34	35.41	45.85	50.55	52.20	50.55	64.80
N. C. States	.....	13.53	16.28	17.25	32.02	39.24	44.15	48.64	50.78	67.04
Western States	.....	21.47	23.35	27.22	42.20	60.85	61.59	67.08	62.13	80.97
New York	.....	16.12	19.50	27.69	40.91	49.73	53.47	52.15	58.12	70.85
New Jersey	.....	15.07	18.99	24.02 (1899)	37.63	58.51	60.92	61.89	58.51	74.40
Ohio	.....	13.37	16.59	19.50	33.33	43.79	48.82	52.88	48.20	70.37
Massachusetts	.....	19.51	25.21	30.08	36.08	49.13	52.36	53.75	52.38	73.17
Iowa	.....	15.60	17.93	20.52 (1899)	31.70	39.70	42.82	52.15	61.87	80.25
California	.....	26.55	29.80	33.23	47.65	75.25	70.98	78.17	67.18	81.66

[1] Data furnished by U. S. Bureau of Education Reports.

TABLE 7.

Expenditure per Capita of Total Population.[2]

STATES	'70-'71	'79-'80	'89-'90	'99-'00	'09-'10	'11-'12	'13-'14	'15-'16	'17-'18	'19-'20
Pennsylvania	$2.36	$1.72	$2.46	$3.41	$5.22	$5.34	$6.37	$7.24	$7.90	$7.51
United States	1.75	1.56	2.24	2.84	4.64	5.05	5.62	6.28	7.26	7.48
N. A. States	2.38	1.97	2.76	3.99	5.53	5.89	6.66	7.12	7.52	9.00
N. C. States	2.14	2.03	2.81	3.27	5.52	5.93	6.77	7.72	9.78	10.26
Western States	2.15	2.41	3.37	4.21	7.27	8.22	8.64	9.53	10.89	12.72
New York	2.17	2.03	2.92	4.00	5.69	6.08	6.66	6.69	7.61	9.28
New Jersey	2.48	1.66	2.31	3.51	6.72	7.59	8.27	8.86	9.82	11.23
Ohio	2.52	2.24	2.89	3.21	5.35	5.89	7.00	7.89	9.58	9.88
Maryland	1.53	1.65	1.83	2.30	2.92	3.13	4.12	3.84	4.32	5.37
Massachusetts	3.73	2.80	3.70	4.93	5.98	6.44	7.07	7.35	8.11	9.85
Iowa	2.70	2.76	3.34	3.81	5.76	6.58	7.40	9.35	13.16	13.51
California	2.93	3.31	4.29	4.65	7.66	9.30	9.64	10.93	10.94	11.43

[2] Data furnished by U. S. Bureau of Education Report.

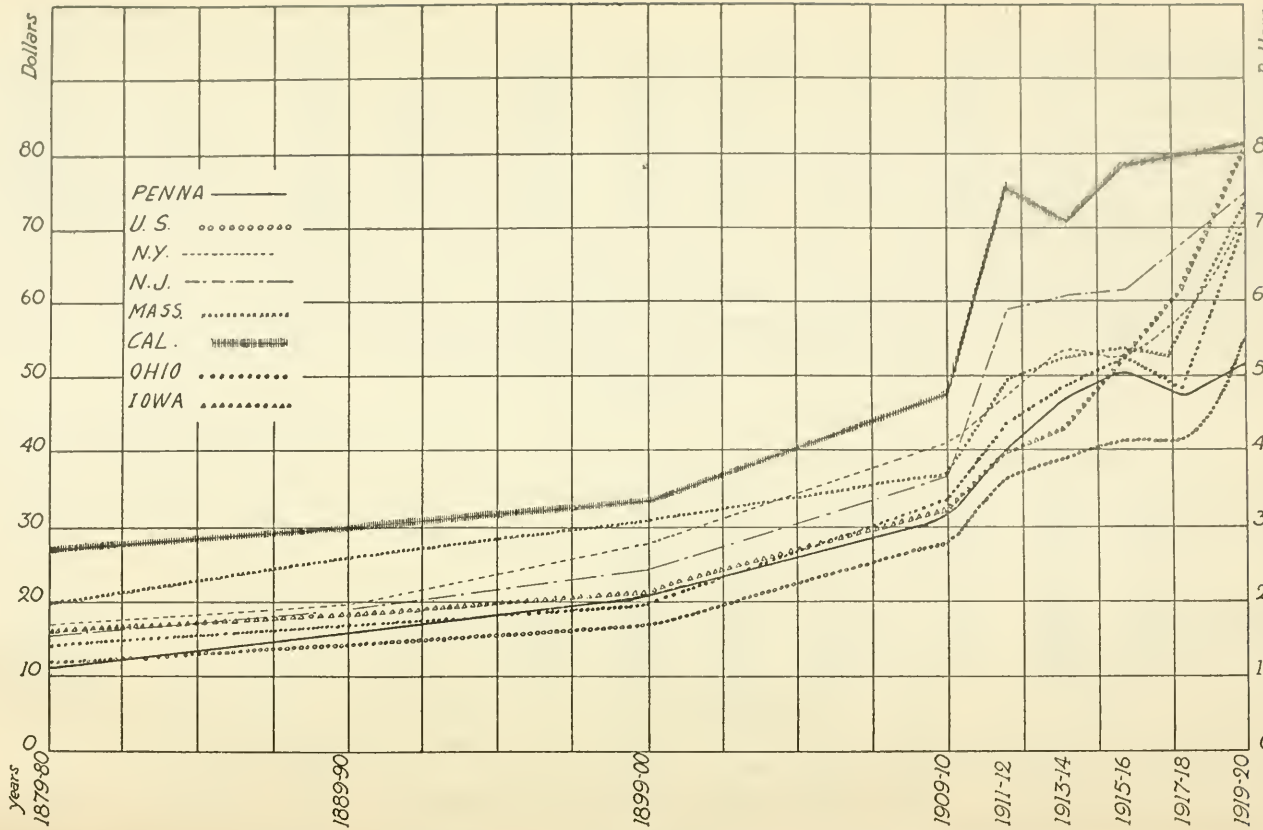


DIAGRAM 1.—EXPENSE PER CAPITA OF AVERAGE ATTENDANCE, 1880-1920.

Comparative Costs.—Table No. 7 (page 25) giving the expenditure per capita of total population during the period 1870-1920, shows the efforts made to support public education in Pennsylvania in comparison with efforts made in other states. This table and the accompanying diagram, Diagram 2 (page 28), shows Pennsylvania to have a low position. This means that, taking man for man in Pennsylvania as compared with citizens of other states, they have not, during these fifty years, put so much money into education. This would indicate that in order for Pennsylvania to make its schools equally efficient with those of other states it is necessary that its expenditures be increased.

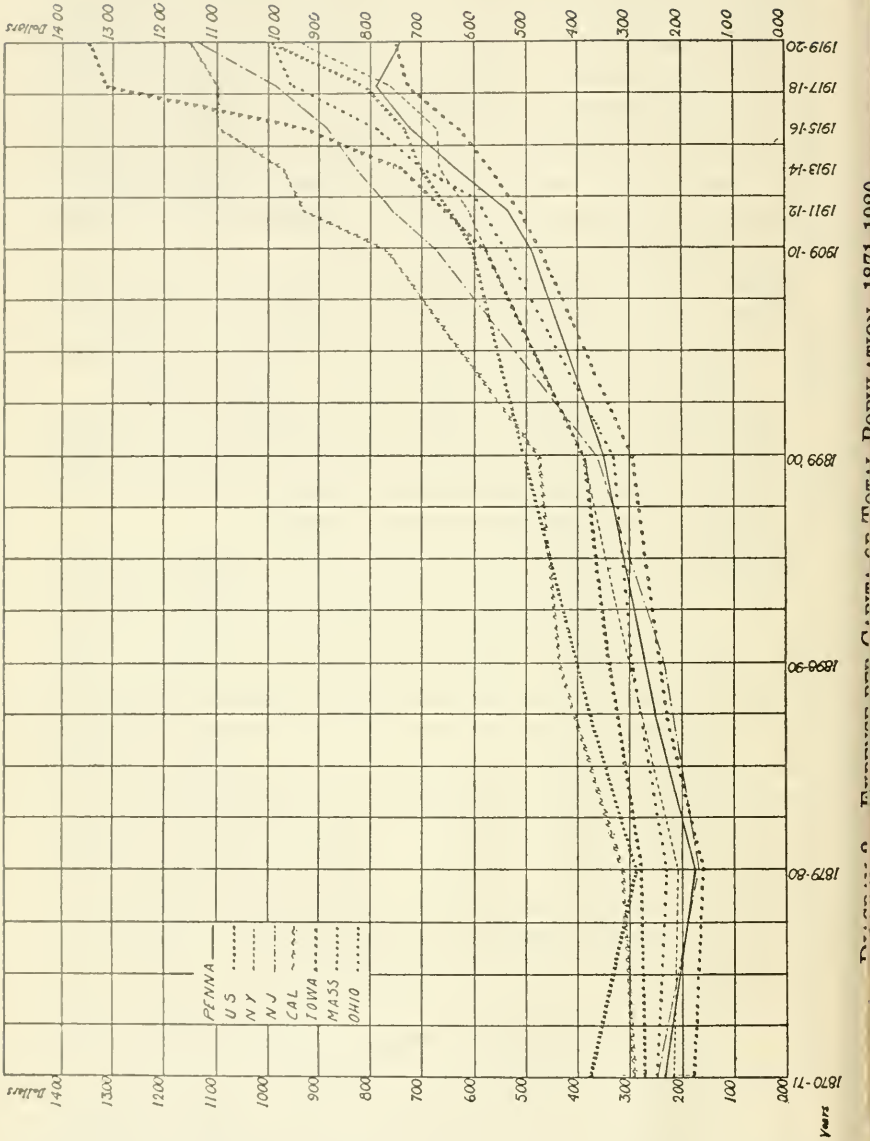
Similar data giving expenditures per capita of average daily attendance for teachers' salaries and expenditure per capita of school population shows Pennsylvania in the same relative position. They are not included here because of lack of space.

The conclusion therefore is, from the standpoint of the money put into the schools per pupil attending and per inhabitant, that increasing the expenditures for Pennsylvania schools was a wise policy; that it was, in fact, an absolute necessity.

Comparative Tax Rates.—Another type of material that may be used to throw light upon the question is a comparison of the tax rates paid in the different states for the support of schools. Data under this head is available, but is not so complete. Comparing true tax rates in which the differences of rates of assessment have been eliminated for the year 1915, it is clear that the tax rates for schools in Pennsylvania cities of from 30,000 to 100,000 population were lower as compared with cities generally. Of thirteen Pennsylvania cities only five had a true tax rate as high as the median of eighty-four cities. These cities compare more favorably as regards taxation for schools than for taxation for all local purposes including schools. In this case only two cities of the thirteen had a true tax rate above the median. Data for the year 1921 are not complete. Such as they are, however, they show that Pennsylvania cities occupy a relatively low position as regards the tax rate for cities.*

A comparison of the true tax rates in rural school districts in Pennsylvania and the state of New York for the year 1919 shows that their median tax rates are approximately the same—5.7 mills

*See Updegraff, Schoolmen's Week Proceedings, 1917, pp. 101–115.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and 5.4 mills respectively. A comparison of the true tax rates for school purposes for cities of the two states for the same year do not show so favorably for the state of Pennsylvania. The true tax rate for cities in Pennsylvania for that year was 6.4 mills while in the state of New York it was 7.9 mills.

These data go to show that from the standpoint of the cost per $100 of taxable property, an increase in the cost of schools of Pennsylvania would not cause a greater burden upon the people than that borne by people in other states.

Comparative data for the cost of schools for the year 1921-22, the first year of the operation of the Edmonds Act, are available to a very small extent. We know, however, that the median true tax rate for schools in the cities of Pennsylvania for the year 1922 was 9.2 mills, 1.3 mills more than the median tax rate for cities in the state of New York for the year 1919. Inasmuch as it is probable that the tax rate of the cities in the state of New York advanced during this three-year period as much or more than this amount, it would not seem as though the local city tax rates caused by the administration of the Edmonds Act were unreasonably high. Taking into account, therefore, the relative low position of Pennsylvania cities as compared with other cities in the United States in previous years it cannot be said that the schools of the state are an undue burden upon the city tax-payers.

Comparative Salaries of Teachers in City Schools.—There is one sort of data that seems fairly complete for the year 1922. It is that of teachers' salaries in all classes of districts in the various states of the Union. The Research Department of the National Education Association has received data from several hundred districts of all sizes giving the exact salaries paid to all teachers. The median salaries have been computed for the individual cities, for the states as wholes and for cities arranged in groups. The median salaries paid in each state, to all the teachers serving in the cities in each group in elementary teaching positions, show Pennsylvania salaries to rank as follows:

Elementary Teachers in Cities	United States	Pennsylvania	Rank of State
100,000 and over	$1,848	$1,966	3
25,000 to 100,000	1,379	1,244	24
10,000 to 25,000	1,241	1,130	28
2,500 to 10,000	1,097	1,029	24
Villages and towns, 3 or more teachers	1,010	992	28
Country schools, 3 or more teachers	885	881	25
Country schools, 2 teachers	877	735	30
Country schools, 1 teacher	774	655	34
Consolidated schools	987	831	33

This data proves that salaries paid elementary teachers under the Edmonds Act are near or below the average in all classes of cities except the first class, in which group salaries are higher. Should the comparison be confined to the states in the northern half of the country, Pennsylvania would rank among the lowest states. Since such a comparison is a fair one it would seem that there can be no doubt that the standard for salaries set up in the Edmonds Act, notwithstanding the fact that there will be increases in later years under this head, are warranted and should be maintained.

Current Expenses in Cities Compared.

Such data as is available relative to cost of education in cities in 1921-22 is presented in Table 8. (See page 31.) These data have been furnished by the State Superintendents in the various states in response to a request of this Committee.

The cities in the table are arranged according to population and in such a way as to place cities of approximately the same population on the same horizontal line. This shows that the cost of education per pupil is not on the whole so high in Pennsylvania cities as in those of New York, Illinois, Connecticut and Massachusetts.

TABLE 8.

Comparison of Current Expenses per Average Daily Attendance on Basis of Population in Thousands in Various States, 1921-1922.

PENNSYLVANIA			NEW YORK			ILLINOIS			CONNECTICUT			MASSACHUSETTS		
CITIES	Population in thousands	Current expense per average daily attendance	CITIES	Population in thousands	Current expense per average daily attendance	CITIES	Population in thousands	Current expense per average daily attendance	CITIES	Population in thousands	Current expense per average daily attendance	CITIES	Population in thousands	Current expense per average daily attendance
Philadelphia..	1,823	$ 72.89												
Pittsburgh...	558	67.46	Buffalo.....	506	$121.86							Boston.....	748	$80.53
			Rochester.....	295	119.37									
			Syracuse.....	171	79.49							Worcester...	179	99.61
Scranton.....	137	70.39							Bridgeport...	143	$59.79			
									Hartford....	138	76.18	Springfield...	129	118.21
Reading.....	107	62.15	Albany.....	113	102.08									
Erie.....	102	101.21	Yonkers.....	100	114.34							Lynn.....	99	69.02
			Utica.....	94	90.69							Lawrence....	94	74.33
												Somerville...	93	74.40
Harrisburg...	75	80.57	Schenectady..	88	85.32	Peoria.....	76	$ 91.36						
Wilkes-Barre.	73	65.21	Troy.....	72	110.67									
Allentown....	73	66.40												
Johnstown...	67	82.79				East St. Louis.	66	73.55						
						Rockford.....	65	103.56						
Lancaster....	60	59.83							New Britain.	59	63.29			
York.....	47	60.92	Niagara Falls.	50	98.44							Quincy.....	47	65.48
McKeesport..	45	70.80	Elmira.....	45	91.25	Decatur.....	43	89.09				Newton.....	46	83.77
												Chelsea.....	43	52.88
Williamsport.	36	174.63	Poughkeepsie.	35	77.41	Joliet.....	38	122.79						
						Aurora.....	36	85.74						
						Rock Island...	35	84.32						
Easton.....	33	78.44	Amsterdam...	33	68.27									
Norristown...	32	59.32				Moline.....	30	80.86						

One very important consideration that should always be kept in mind in connection with the increase in the cost of education is that most of this increase was due to circumstances outside of the control of school superintendents and school boards. Doctor John K. Norton, Director of the Research Department of the National Education Association, has brought this out in a striking manner in a recent Bulletin published by that organization.[1] The chart which represents clearly and graphically the facts is printed herewith—Diagram 3 (page 33). It shows that notwithstanding the fact that the cost of education in the United States as a whole increased seven and a half times from 1890 to 1920, only 8 percent of this increase was due to conditions within the control of school boards and school superintendents; the next factor causing the increase was the depreciation of the dollar, which accounts for 70 percent of it; the remainder, 22 percent, was due to the increase in the attendance.

Wealth of Pennsylvania.—The next question in order is whether the state of Pennsylvania is in a good position, from the standpoint of her wealth, to bear the costs of the present financial burden for education. The latest governmental investigation made of the taxable wealth of the various states shows that Pennsylvania in 1912 ranked nineteenth in the true valuation per capita of general property. The amount of general property available for taxation is not, however, a true index of ability of the people to support schools. Possibly the best index is furnished by a comparison of the income of the inhabitants of each of the states. The National Bureau of Economic Research has recently published the results of several years' study in this field. This shows that in per capita income, Pennsylvania again ranks nineteenth with an income of $683, the standard for the United States being $627. The list of states having a larger income per capita is given in Table No. 9 (page 34). From this data it is clear that in order for Pennsylvania to put as much money into her schools as many other northern states she will have to impose higher rates of taxation both upon general property and upon incomes from other classes of property, provided such property is made taxable.

[1] Facts on the Cost of Public Education and What They Mean, Bulletin One of the Research Department of the National Education Association.

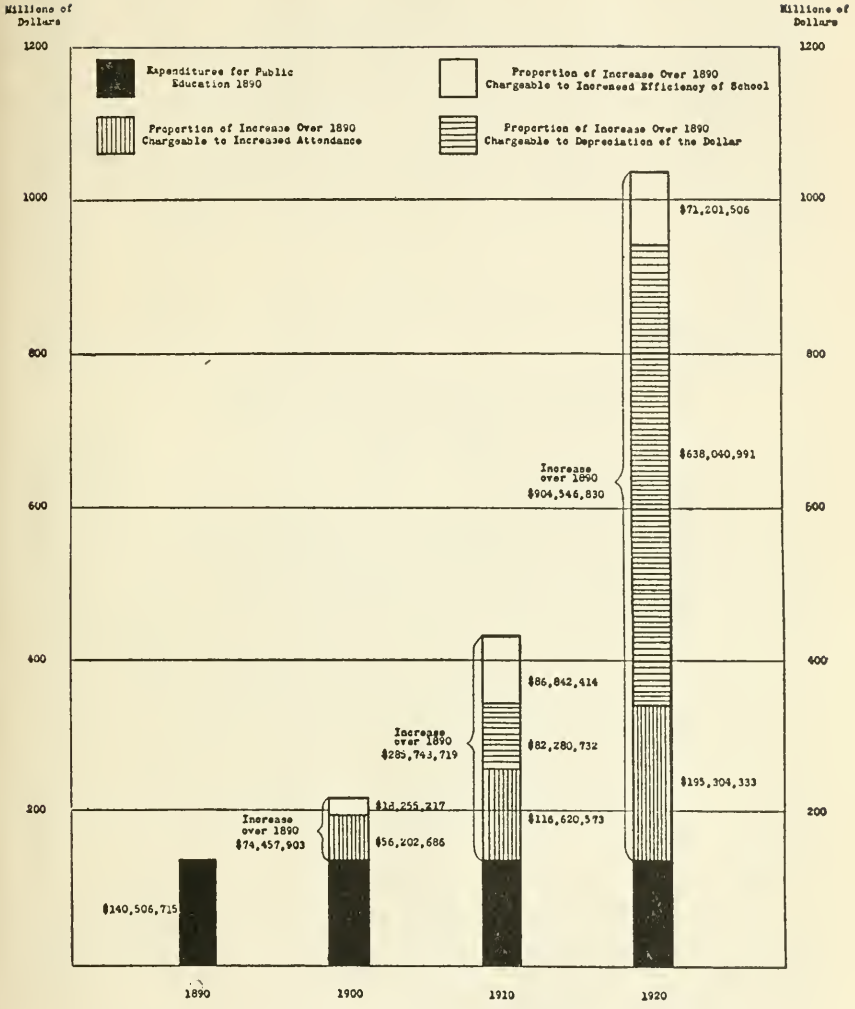


DIAGRAM 3.—AN ANALYSIS OF THE INCREASE IN EXPENDITURES FOR PUBLIC EDUCATION BY DECADES, 1890 TO 1920.

TABLE 9.

INCOME PER CAPITA—1919.[1]

	United States	$627
1	New York	874
2	Nevada	850
3	California	820
4	Delaware	792
5	Wyoming	789
6	Massachusetts	788
7	Washington	786
8	Illinois	765
9	New Jersey	758
10	Rhode Island	720
11	Connecticut	717
12	Oregon	711
13	Iowa	706
14	Michigan	704
15	Nebraska	702
16	Ohio	689
17	Maryland	689
18	South Dakota	685
19	Pennsylvania	683

[1]"Distribution of Income by States in 1919"
Oswald W. Knauth.

It remains for the people of Pennsylvania to decide whether they will prefer to tax themselves more heavily and thus have schools among the very best of the entire Union or to have their efficiency determined by the wealth that lies back of the schools. However, in so far as the present Pennsylvania standards of salaries are concerned, and very probably of total expenses, it seems clear that they cannot be higher relatively than her position in regard to income. In fact Pennsylvania's rank as to salaries of elementary teachers in all classes of schools is even lower than her wealth per capita of population in 1912 or her income per inhabitant in 1919.

Thus, from every point of view it seems that the salaries should be at least as high as those established by the Edmonds Act, and since the teachers' salaries consume from 60 to 80 percent of the total expenses of the schools, that the total expense of schools should not be reduced below their present level.

Distribution of Costs between State and local districts.—The question which next arises is: How should the cost of schools be distributed between the state and local districts? The practice of Pennsylvania as compared with the practices of other states during the past 30 years in the proportion of cost borne by the

state is shown in Table No. 10, which gives the percent of school revenue derived by the local districts from the state in Pennsylvania and in the United States as a whole and in various groups of states and seven individual states. From this table it will be seen that the practice is quite varied and, as may be inferred, there are not at the present time any well-established standards in this regard. Pennsylvania's rank among all the states in the Union in the year 1919-20 was twenty-seven, which means that twenty-six states obtained a greater percent of support from the central government and that twenty-one received a less proportion.

TABLE 10.

PERCENT OF SCHOOL REVENUE DERIVED FROM STATE.[1]

STATES	'89-'90	'99-'00	'09-'10	'11-'12	'13-'14	'15-'16	'17-'18	'19-'20
Pennsylvania	10.59	22.0	15.6	14.26	10.78	10.32	9.6	15.9
United States	23.75	20.3	18.1	19.41	18.66	17.82	16.8	16.8
N. A. States	17.11	15.1	12.3	15.26	13.37	13.04	17.4	16.85
N. C. States	17.61	14.8	14.7	13.79	15.10	13.84	13.2	26.22
Western States	29.40	33.4	20.4	24.58	25.35	23.99	20.3	16.60
New York	19.83	10.9	9.6	9.19	8.08	8.18	9.5	12.1
New Jersey	62.34 (1888)	40.6 (1898)	17.6	51.42	46.84	44.08	45.3	35.6
Ohio	18.98	15.2	10.2	16.91	9.21	9.66	8.2	7.3
Massachusetts	3.35	1.2	2.0	2.22	1.93	1.76	3.7	12.3
Iowa	3.90	1.4 (1898)	7.5	7.14	6.55	8.00	2.2	1.5
California	51.64	48.7	28.1	30.88	27.68	24.15	22.3	20.4

[1]Data furnished by United States Bureau of Education Reports.

Another standard which will assist in reaching a judgment is furnished by a consideration of the percent of the total expenses of state government that goes to the support of education. In this respect Pennsylvania ranked 39th in the year 1918-19 as may be observed from Table 11 (see page 36). Should the percentage of expenditures in other states have remained the same in 1922 as in 1919, Pennsylvania with her $36,000,000 appropriation for education would still have a rank not higher than the 30th. There were in 1918-19 only 9 states giving a less proportion. In the amount per capita of population given by the state or central government

to the support of schools, Pennsylvania in the same year ranked 35th as is shown in Table 12. In the percentage of total revenue of local districts received from the state, Pennsylvania ranked twenty-sixth, as may be seen from Table 13. Her present rank even with the larger appropriation is probably no higher. In so far as such data as these furnish a standard it would seem that Pennsylvania took a normal step forward in increasing the amount of her appropriation for education and that she might properly still further increase her state appropriation for education.

TABLE 11.

States Which Had in 1918-19 a Higher Percentage of Expenditures of State Government for Schools Than Pennsylvania.[1]

		Percent
	United States	33.8
1	Utah	57.5
2	North Dakota	54.2
3	Texas	53.2
4	New Mexico	51.0
5	Mississippi	50.8
6	New Jersey	49.9
7	Georgia	49.2
8	Delaware	48.7
9	South Dakota	46.2
10	California	45.0
11	Alabama	43.7
12	Arizona	43.6
13	Nevada	43.5
14	Nebraska	43.3
15	Wisconsin	42.6
16	Michigan	42.3
17	Washington	42.4
18	Kansas	42.4
19	Kentucky	41.7
20	Virginia	40.5
21	Indiana	40.0
22	Wyoming	38.4
23	Minnesota	38.3
24	Arkansas	37.9
25	West Virginia	37.1
26	Idaho	35.8
27	Montana	35.2
28	Maine	34.6
29	North Carolina	34.3
30	South Carolina	34.1
31	Oregon	33.0
32	Missouri	31.7
33	Illinois	31.3
34	Tennessee	31.0
35	Oklahoma	30.9
36	Louisiana	29.9
37	Colorado	29.5
38	Ohio	29.9
39	Pennsylvania	26.8

[1]Bureau of Census, Financial Statistics of States, 1919, p. 88.

TABLE 12.

States Which Had in 1918-1919 Higher Expenses of State Government per Capita for Schools than Pennsylvania.[1]

	United States	$1.74
1	Arizona	5.46
2	Utah	5.13
3	Nevada	4.54
4	New Jersey	4.04
5	Minnesota	3.62
6	Wyoming	3.55
7	California	3.49
8	Michigan	3.42
9	Montana	3.19
10	North Dakota	3.19
11	Washington	3.00
12	Maine	2.98
13	Texas	2.86
14	Wisconsin	2.85
15	New Mexico	2.77
16	South Dakota	2.77
17	Delaware	2.63
18	Idaho	2.29
19	Vermont	2.25
20	Kentucky	1.93
21	Nebraska	1.91
22	Indiana	1.89
23	Colorado	1.75
24	Virginia	1.72
25	Maryland	1.68
26	Oregon	1.67
27	Kansas	1.63
28	New Hampshire	1.41
29	Mississippi	1.40
30	Connecticut	1.37
31	Alabama	1.36
32	Missouri	1.34
33	Georgia	1.30
34	Iowa	1.29
35	Pennsylvania	1.25

[1]U. S. Bureau of Census, Financial Statistics of States, 1919, p. 87.

TABLE 13.

Percentage of Total Revenue Receipts of Local Districts Coming From the State, 1919-20.[2]

1	Texas	54.0
2	Mississippi	52.1
3	Alabama	51.3
4	District of Columbia	49.6
5	Georgia	43.5
6	Maryland	41.6
7	Kentucky	37.1
8	Virginia	36.7
9	Maine	35.6
10	New Jersey	35.6
11	Delaware	35.3
12	Vermont	33.1
13	Utah	31.5
14	North Carolina	30.1
15	Nevada	26.6
16	Louisiana	24.5
17	Wyoming	24.3
18	Arkansas	23.7
19	California	20.4
20	Minnesota	19.5
21	Arizona	18.7
22	Washington	18.1
23	Tennessee	17.8
24	New Mexico	17.6
25	Michigan	17.1
26	Pennsylvania	15.9

[2]Furnished by U. S. Bureau of Education.

Appropriations.—Summing up the inferences derived from the data presented to test out the wisdom of expenditures required by the Edmonds Act it may be said that the expenses of schools required by it are near the norm for the United States as a whole but below the norm for the northern states; that the local tax rates required by it are probably no higher than the average; that the amounts of money granted by the state when measured both as to percent of total expenses and by the cost per capita are near the norm, and that in the appropriation of total expenses going to the support of schools she is below the average.

Taken all in all, therefore, the practice of other states in the Union justifies an increase in the state appropriations for education rather than an increase in the local tax. However, increases in the latter may still be made without burdening the people unduly.

Present Distribution of State Aid to School Districts.

The present system of state aid to local districts is contained in the Edmonds Act. By reason of that fact the system of state aid has become closely identified in the minds of many people with the scheme of salary schedules and with the plan for gradually increasing the qualifications of teachers which are also embodied therein. As a matter of fact they are not interdependent. Although closely related, any one of these features may be changed without altering the others. It is important that this truth be kept in mind in the further consideration of the state's educational finances, *viz.*, subsidies and standards are closely connected in the same relationship as cause and effect, but they are not parts of an organic whole.

The field of this inquiry does not cover the careful study of the structure of the salary schedules but rather only the amounts of money they involve; neither does it include the standards for the qualifications of teachers. It is believed, however, that these features of the Edmonds Act, forming as they do, part of a broad statesman-like plan for the gradual improvement of instruction in the schools, stamp it as one of the most worthy pieces of educational legislation in the history of the Commonwealth. These standards should be maintained against any effort which directly or indirectly may have the effect of lowering them.

Method of Distribution Under the Edmonds Act.

Under the Edmonds Act first class districts receive for each teacher, supervisor and principal and any other members of the teaching and supervisory staff in day schools 25 percent of the annual minimum salary ($1,200 or $300 per person) established for elementary teachers for that class of district. Second and third class districts receive 35 percent of the minimum standard salary ($1,000 or $350 per person) adopted for those classes of districts. In fourth class districts the subsidy amounts to 50 percent of the minimum salaries, which are $100 per month for elementary teachers with Normal School certificates or equivalent, and $130 per month for high school teachers with Normal School certificates or equivalent. Grants for teachers holding lower grades of certificates are based in all districts upon the salary of $85 per month for teachers with Partial certificates and $75 per month for teachers with Emergency certificates.

This system of grants established in this Act represents an advance over previous Pennsylvania legislation of this character. It was the best plan of distribution obtainable at the time of its passage and the author of this chapter gave it his support. Its advantages will be brought out in the course of the further treatment of this study, certain of which are as follows:

ADVANTAGES—

1. **Longer School Terms.**—It encourages the lengthening of the school term in fourth class districts. It is in this class of districts that practically all schools of less than 9 months' terms are to be found.
2. **Better Teachers.**—It rewards school districts for employing teachers of superior qualifications in so far as such qualifications can be determined by the type of certificate held. This is accomplished by giving larger quotas for teachers holding higher certificates. This does not apply, however, to certificates higher than that of the Normal School certificate except in the case of the High School teacher certificate in fourth class districts.
3. **Easy Budgeting.**—It promotes easy budgeting both upon the part of the local district and the state government. This is because its terms are easily understood and the computations required are of the simplest sort.

4. **State Appropriation.**—It begins to recognize the principle that a larger proportion of teachers' salaries should be paid by the state to the poorer districts than to the wealthier districts. How far this principle is followed in reality will be indicated when a consideration of the results of the actual operation of the law is reached.

DISADVANTAGES—

Notwithstanding these advantages and the improvements it has introduced over previous plans followed in this state, the plan has certain disadvantages which prevent the realization of the higher efficiency which it is possible for a system of state aid to produce. These disadvantages will be pointed out more clearly in the more detailed study of the operation of the plan as it is presented later, but certain of the most important points may be indicated here:

1. **Incorrect Distribution of Appropriation.**—The wealthy districts receive too much and the poor districts too little within each class of district.
2. **Unequal Salary Grants.**—Third class districts are much poorer, as a group, than second class districts, yet they receive the same grants of $350 per teacher.
3. **Insufficient Encouragement.**—It fails to stimulate local districts to bring their schools up to the highest standard and to penalize them whenever they seek to lower efficiency, which end might be accomplished by taking into account the amount of the tax rate in distribution of aid.
4. **Limited Special Aid.**—The number of forms of Special Aid is limited.
5. **Increments in Salary.**—State aid does not cover the increments in salary above the initial salary.
6. **Fixed Salary Schedule.**—The Act fixes minimum salaries for local communities including increments over a period of years. At the present time in Pennsylvania this should not be considered a disadvantage. The plan is not consistent, however, in that the increments are not prescribed for fourth class districts and extend over a short period only in third class districts.

RECOMMENDATIONS PROVIDED THE PRESENT SYSTEM OF AID IS MAINTAINED—

In order to promote the highest efficiency in the local school

districts it would be advisable, in case the present system of aid be retained, to remedy the deficiencies pointed out above by:

(a) Establishment of state-wide minimum salary schedule for fourth class districts and extension of the increments already fixed for third class districts.

(b) By increasing the allotment to third class districts from 35 percent to 40 percent.

(c) By having state aid apply to the increments in salary above the initial salary, at the same time diminishing the percentages of the grants so that total appropriations from the state will not be increased by such action.

It is believed, however, that the best interests of the schools of the state would be served if a plan for state aid were adopted which would stop the inefficient use of money involved in giving wealthy districts as much as poor districts, and those which levy a low tax as much as those that levy a high tax within the various district groups. A better plan would be that which would equalize educational conditions between districts and also stimulate each district to its best efforts. Any plan which would realize these ends would assist much more effectively in achieving the objects implied in the Edmonds Act than the scheme for state aid contained therein or in the improvement of this Act as recommended above. Such a plan should be put into effect at the earliest possible time without sacrificing the present standards of the Act relative to teachers' salaries and to teacher qualifications.

Proposed Modification of the Edmonds Act.

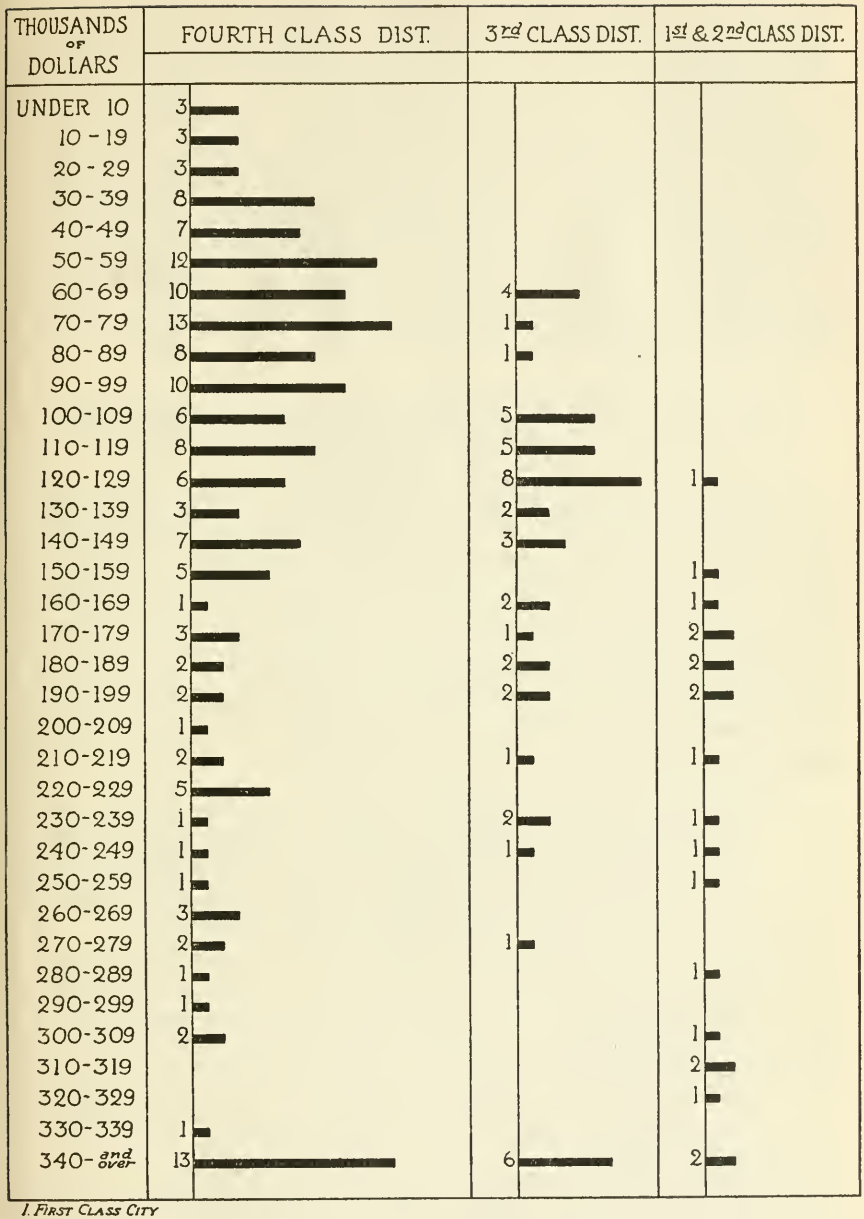
It is believed that such a plan has been found for the better realization of the objects of the Edmonds Act.

This plan of state aid is composed of two parts, GENERAL AID and SPECIAL AID. By GENERAL AID is meant those grants that are given to all school districts of the state irrespective of the kind of school they have maintained. SPECIAL AID are those grants which are given to certain districts to assist in support of particular projects or plans that they have undertaken.

The plan proposed for General Aid may be called THE ABILITY AND EFFORT PLAN since it responds closely and immediately to any change in the local districts in their ability to support their schools or in the effort which they make by putting more or less

money into their schools. It may be based either upon total expenses or upon teachers' salaries alone, excluding all other expenses. It has no reference whatever to expenditures for capital outlays, such as new buildings or permanent improvements or for debt service such as is included in the payment of bonds and interest. It is based upon the teacher quota as in the Edmonds Act, but the amount of the quota is much more variable.

The *ability* of a school district to support schools depends upon the amount of taxable wealth it has. Districts vary greatly in this respect. But before they can be compared it is necessary to eliminate the differences among them in the size of their schools. This can be done by ascertaining the amount of property taxable for schools back of each teacher employed. It is necessary also that another adjustment be made. Different districts assess property at different rates of assessment. In some the average rate of assessment is 90 percent of its true value, in others 50 percent, in others at 25 percent. Before comparison can be made it is necessary to ascertain what the taxable wealth would be if assessed at 100 percent of its true value. This amount divided by the number of teachers gives the *true valuation per teacher*. It furnishes a figure from which all the disturbing factors are removed and so they may be safely used as indicating the relative differences in the school districts in their *ability* to support schools. Diagram 4 shows the distribution of true wealth per teacher in each of the various classes of school districts. Every first and second class district in the state is included; all of the third class districts in twelve of the typical counties and a mechanical sampling of all the fourth class districts in the same twelve counties. It is believed that the distribution in the third and fourth class districts is typical of the state as a whole.



1. First Class City
2. Ibid

Diagram 4.—Distribution of True Valuation Back of Each Teacher in Each of the Various Classes of School Districts in Pennsylvania, 1920-1921.

The *effort* which a district makes to support schools is determined primarily by the amount of money it spends per school unit. As the "ability and effort" plan is arranged, the differences among the districts in this respect are accurately measured by the true tax rates, meaning by this term the tax that a district would levy if its property were assessed at 100 percent of its value. The differences in true tax rates among the various districts under the present plan of state aid are shown in Tables 18, 19 and 20 (pages 52 and 53).

The significance of these terms "ability" and "effort" will be still further developed in the later discussion which is to follow the next section of this chapter.

Principles Underlying Distribution of State Aid in School Districts.

Before furnishing a statement of the plans for General Aid and Special Aid it is desirable to give the principles which it is believed should govern the granting of state funds to local school districts and to evaluate the present plan in the light of those principles. It should be emphasized, however, that this evaluation is not made in criticism of the present plan of the Edmonds Act but to point out those new features which should be incorporated into the plan which would better promote the greatest efficiency in local school districts through the bestowal of state grants.

1. **Equalization of Ability.**—State aid should be distributed in such a way as to insure a good school to every community, upon a reasonable tax rate. This may be done by making state aid dependent upon the amount of property taxable for schools, but in inverse proportion.
2. **Reward for Effort.**—It ought also to stimulate every school district to have better schools, thereby constantly raising the standard of education and promoting the continual progress of the life of all the people in the state. Adjusting state aid to the number of mills levied within the minimum and maximum limits prescribed by the state will assist in bringing about such a result when properly safeguarded.
3. **Special Aid.**—It also ought to reward any school that takes a new and approved step in an efficient manner because of the meritorious action that such a step indicates. Direct grants for specific accomplishments will realize this end.

4. **Equality of Opportunity for All Children.**—It should do all these things, not only to protect the state from ignorance in the exercise of the ballot and to provide leaders, but also to promote in every possible way the individual welfare of every person in the state. In applying this principle to schools, it means that all forms of aid should be utilized in such manner as to guarantee for each child that education which will best fit him for life, irrespective of the particular community in which he may happen to live.
5. **Self-Determination of Action.**—State aid should be distributed also in such a way as to promote the efficient participation of citizens in the exercise of citizenship. The converse of this proposition is that it should not be so administered as to promote bureaucratic control in either state, county or local education offices. This can be accomplished, if on the one hand, the withholding of funds by state officers is exercised only in proportion to the seriousness of the shortcoming; and if on the other hand, right action on the part of local districts unfailingly meets with its reward.

   The facts are that, in a fairly large number of communities of every state, we need a change in attitude on the part of the citizens toward the schools. These communities can frequently be led to change their ideas and to substitute right action over a sufficiently long period of years to bring about a fundamental change in their attitudes toward the benefits of education. That which a citizen learns through the operation of his own action becomes established, while that which is forced upon him against his will he opposes. It is, therefore, fundamental in state aid that we leave final decisions, provided the minimum and maximum standards fixed by state laws are observed, to the local communities and allow them to choose what they think is best. Such standards should ordinarily, however, permit of considerable range for freedom of action. If this is done we have stronger agencies in the making of a better government and a better society.
6. **All Districts Encouraged.**—If a system of state aid is working properly, not only are the most advanced districts encouraged and thus the entire body kept moving, but also those districts which are lagging behind are constantly stimulated to come up to the standards that have already been adopted through the experience of the more progressive.

Evaluation of Pennsylvania's State Aid.

General Aid.—The granting of General Aid on the basis of the number of teachers in a school district is in accordance with the best practice. The differences in the amounts of grants made to teachers in first, second and third class districts is so small, however, that General Aid is almost a negligible factor in promoting efficiency in local schools. In making the amount of the grant for each teacher in fourth class districts dependent for the next five years upon the kind of certificate held and the length of term, it offers encouragement to local districts to employ better teachers and to increase the number of months of schooling. The granting of less amounts of aid for teachers with lower grade certificates works, however, to the advantage of the low valuation districts. These districts are so heavily burdened in order to maintain even the cheapest school that many of them feel it necessary to employ the lowest salaried teachers. This may be seen from Table 14.

TABLE 14.

THE RELATIONSHIP BETWEEN THE AVERAGE AMOUNT PER TEACHER RECEIVED FROM THE STATE IN 1922 AND THE TRUE VALUATION IN 1921 PER TEACHER FOR TYPICAL FOURTH CLASS DISTRICTS IN 12 TYPICAL COUNTIES.

True Valuation per Teacher	STATE AID																													
	$150	250	280	290	300	310	320	330	340	350	360	370	380	390	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550	Total
$ 0,000– 9,999	1				1																										2
10,000– 19,999					1		1								1	1															4
20,000– 29,999			1										1												1						3
30,000– 39,999					1								1		2	1		2												1	8
40,000– 49,999		1			1		1					1			2															1	7
50,000– 59,999							2			1			1	2	1	1		1						1	2						12
60,000– 69,999								1	1			1	1				2	1					1								8
70,000– 79,999		1	1	1			2	1		2				2										1	1						12
80,000– 89,999			1					1		2	1	1							1											1	8
90,000– 99,999								2					1		2	1				2					2			1			11
100,000–109,999								1	1	1			1												1					1	6
110,000–119,999								2	1				1									1			2					1	8
120,000–129,999			1			2		1							1										1						6
130,000–139,999							1															1								1	3
140,000–149,999							1			1				1	2	1				1											7
150,000–159,999									1	1	1						1														4
160,000–169,999																			1												1
170,000–179,999																					1									2	3
180,000–189,999																	1								1						2
190,000–199,999																								1						1	2
200,000–209,999											1																				1
210,000–219,999								1																		1					2
220,000–229,999												1											2			1					4
230,000–239,999							1																								1
240,000–249,999								1																							1
250,000–259,999												1																			1
260,000–269,999										1						1									1						3
270,000–279,999						1											1														2
280,000–289,999																										1					1
290,000–299,999																														1	1
300,000–309,999				1																									1		2
330,000–339,999												1																			1
340,000–349,999														1								1									2
380,000–389,999																														1	1
400,000–409,999											1																				1
410,000–419,999																														1	1
420,000–429,999																						1								1	2
430,000–439,999															1															1	2
460,000–469,999					1																										1
480,000–489,999																														1	1
560,000–569,999											1																				1
670,000–679,999																					1										1
TOTAL ...	1	2	4	2	5	3	9	11	4	9	5	6	7	6	12	6	5	4	2	3	2	4	3	3	12	3	..	1	1	15	150

Median Line Valuation, $100,000.
Median State Aid, $400.

This table shows the amounts of money, for each teacher employed, received by the typical fourth class districts of the state included in previous tables. The table groups these districts by the amounts of their true valuations per teacher in dollars and then shows for each group the distribution of the amounts of the grants received from the state. The heavy horizontal line divides the districts into two halves from the standpoint of their valuations, while the heavy vertical line divides them into two equal groups from the standpoint of amounts of money received. It will be noted that the median valuation is approximately $100,000, while the median grant is approximately $400 per teacher. By true valuation of property is meant the assessed valuation divided by the rate of assessment.

The significance of this table lies in the distribution of the state grants per teacher among the districts in the four quarters of the table made by these lines. In the low valuation, low grant quarter, there are 41 cases, while in the low valuation, high grant quarter, there are 34 cases. Taking the lower half of the table in the high valuation, low grant quarter, there are 33 cases, while in the high valuation, high grant quarter, there are 42 cases. These figures substantiate the truth of the statement that under the operation of the present plan of state aid in fourth class districts, the low valuation districts as a group, get the smallest amounts, while the high valuation districts get the largest amounts. This is directly opposite to what should exist from the standpoint of promoting the highest efficiency of all of the schools of the state.

This effect of the operation of the plan of General Aid in fourth class districts reveals one of its greatest weaknesses. *State aid should promote the highest efficiency in every school district. This may be done, if in the first place, it puts all of the school districts upon the same financial basis, or at least the districts whose property valuations per teacher are below the average for the state as a whole; and if in the second place, the amount of state aid is made dependent upon the effort made by local districts to support good schools as revealed in their tax rates.*

The extent to which the present plan for General Aid in Pennsylvania satisfies the first of these conditions may be shown from Tables 15, 16 and 17, which give the true valuation of taxable property per teacher in representative fourth and third class districts and in all of the first and second class districts of the state.

The figure used as the rate of assessment was the average of the three figures submitted by the secretaries during the last three years, while the valuation used were those for the year 1920-21. The figure obtained by dividing the true valuation by the number of teachers gives the true valuation per teacher, which when obtained for the various school districts in the state makes it possible to compare all of them on the same basis. *From the standpoint of their ability to support schools these figures not only eliminate the differences in the rates of assessment of property, but also the differences in the sizes of the school districts.*

TABLE 15.

TRUE VALUATIONS PER TEACHER IN TYPICAL FOURTH CLASS DISTRICTS OF TWELVE TYPICAL COUNTIES FOR 1920-1921.

True Valuations Per Teacher	Clearfield	Crawford	Delaware	Forest	Fulton	Lancaster	Luzerne	Northampton	Pike	Sullivan	Tioga	Washington	TOTAL
$ 0,000- 9,999	1	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	3
10,000- 19,999	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	2	3
20,000- 29,999	.....	.....	.....	1	.....	.....	.....	.....	.....	1	1	.....	3
30,000- 39,999	.....	1	2	.....	.....	.....	1	.....	.....	1	2	1	8
40,000- 49,999	2	.....	.....	.....	1	.....	1	.....	.....	1	2	.....	7
50,000- 59,999	3	3	.....	1	1	.....	.....	.....	.....	2	.....	2	12
60,000- 69,999	1	4	.....	1	1	.....	2	.....	.....	.....	1	.....	10
70,000- 79,999	3	1	.....	.....	.....	3	2	1	.....	.....	3	.....	13
80,000- 89,999	2	2	.....	.....	1	.....	1	2	.....	.....	.....	.....	8
90,000- 99,999	.....	2	1	.....	.....	.....	3	2	1	.....	1	.....	10
100,000-109,999	.....	1	.....	.....	1	1	1	1	1	.....	.....	.....	6
110,000-119,999	1	.....	1	.....	.....	3	2	.....	.....	.....	1	.....	8
120,000-129,999	1	1	.....	1	.....	2	.....	1	.....	.....	.....	.....	6
130,000-139,999	.....	.....	.....	.....	1	2	.....	.....	.....	.....	.....	.....	3
140,000-149,999	.....	.....	.....	.....	.....	2	.....	.....	.....	1	.....	4	7
150,000-159,999	.....	.....	.....	.....	.....	2	.....	.....	.....	1	.....	2	5
160,000-169,999	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1
170,000-179,999	.....	.....	.....	.....	.....	.....	1	.....	2	.....	.....	.....	3
180,000-189,999	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	2
190,000-199,999	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	2
200,000-209,999	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1
210,000-219,999	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	2
220,000-229,999	.....	1	.....	.....	.....	1	.....	1	.....	.....	.....	2	5
230,000-239,999	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1
240,000-249,999	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1
250,000-259,999	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
260,000-269,999	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	1	3
270,000-279,999	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	2
280,000-289,999	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
290,000-299,999	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
300,000-309,999	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	2
330,000-339,999	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
340,000-349,999	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
380,000-389,999	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
400,000-409,999	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
410,000-419,999	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
420,000-429,999	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	2
430,000-439,999	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	2
460,000-469,999	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
480,000-489,999	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1
560,000-569,999	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
670,000-679,999	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
TOTAL.....	15	18	13	5	6	21	16	12	6	7	14	21	154

Median True Valuation, $100,000.

Looking at Table 15 (page 49) it may be seen that in a number of counties the amount of true taxable wealth per teacher in one district is twenty times as great as in that of another district. The tax rate that is necessary to pay the balance of the teachers' salaries over and above the state grant in the poorer district would have to be considerably higher than in the wealthier district. For example, a district with a $200,000 true valuation could pay a Normal School graduate $100 per month and levy a two mill tax to pay the difference, while a district with $28,000 true valuation would have to levy a ten mill tax to pay the difference in the salary of $75 a month to a teacher holding the lowest grade certificate. The first of these districts receives far more than is necessary; the second not enough. Both are equally entitled to the highest grade of instruction if they want it. State aid should be so adjusted as to put them on the same financial basis and then permit them to exercise their choice as to the kind of teachers they wish above the standards prescribed by the law. No child's opportunity in life should be narrowed by reason of the fact that he happens to live in a low valuation district.

What has been said of the fourth class districts applies equally well to the third and second class districts as may be seen in Tables 16 and 17. Take two cities, one having a valuation of $120,000 per teacher, another $240,000. Suppose both of these receive $350 per teacher from the state and pay out on an average $1550 per teacher. The first named would find it necessary to levy a tax of ten mills, while the second would have to levy only a five mill tax to pay the difference between the total expense for teaching and the amount received from the state as General Aid.

The effect of this lack of adaptation of the system of state aid to the ability of local school districts to support schools on the basis of their own taxable property is revealed in the wide divergence of the tax rates. Tables 18, 19 and 20 (pages 52 and 53) give this information for fourth, third and second and first class districts respectively. These true tax rates, as they are called, were obtained by multiplying the actual tax rates, as reported by the secretaries of school boards, by the average of the rates of assessment for the past three years. They give the tax that would be levied in each of the school districts provided property was actually assessed at its full, or 100 percent, value.

TABLE 16.

Distribution of True Valuations per Teacher in all Third Class Districts in Typical Counties 1920-21.*

True Valuations per Teacher	Clearfield	Crawford	Delaware	Lancaster	Luzerne	Northampton	Washington	Total
$ 60,000– 69,999	2	.....	.....	.....	2	.....	.....	4
70,000– 79,999	.....	.....	.....	.....	.....	1	.....	1
80,000– 89,999	.....	.....	.....	.....	.....	1	.....	1
90,000– 99,999	.....	.....	.....	.....	.....	.....	.....	.....
100,000–109,999	1	.....	.....	.....	2	.....	2	5
110,000–119,999	.....	.....	1	.....	2	.....	2	5
120,000–129,999	1	.....	.....	.....	3	1	3	8
130,000–139,999	1	.....	.....	.....	.....	.....	1	2
140,000–149,999	.....	.....	.....	1	2	.....	.....	3
150,000–159,999	.....	.....	.....	.....	.....	.....	.....	.....
160,000–169,999	.....	.....	.....	.....	2	.....	.....	2
170,000–179,999	.....	1	.....	.....	.....	.....	.....	1
180,000–189,999	.....	.....	1	.....	1	.....	.....	2
190,000–199,999	.....	.....	.....	.....	1	.....	1	2
200,000–209,999	.....	.....	.....	.....	.....	.....	.....	.....
210,000–219,999	.....	.....	1	.....	.....	.....	.....	1
220,000–229,999	.....	.....	.....	.....	.....	.....	.....	.....
230,000–239,999	.....	1	.....	.....	1	.....	.....	2
240,000–249,999	.....	.....	.....	.....	1	.....	.....	1
250,000–259,999	.....	.....	.....	.....	.....	.....	.....	.....
260,000–269,999	.....	.....	.....	.....	.....	.....	.....	.....
270,000–279,999	.....	.....	1	.....	.....	.....	.....	1
340 and over.....	.....	.....	2	.....	4	.....	.....	6
Total.....	5	2	6	1	21	3	9	47

Median True Valuation, $129,375.
*The five additional counties used in this study have no third class districts.

TABLE 17.

True Valuations per Teacher in all First and Second Class Cities.

True Valuation per Teacher	1920-21
$120,000–129,999	1
130,000–139,999	.....
140,000–149,999	.....
150,000–159,999	1
160,000–169,999	1
170,000–179,999	2
180,000–189,999	2
190,000–199,999	2
200,000–209,999	.....
210,000–219,999	1
220,000–229,999	.....
230,000–239,999	1
240,000–249,999	1
250,000–259,999	1
260,000–269,999	.....
270,000–279,999	.....
280,000–289,999	1
290,000–299,999	.....
300,000–309,999	1X
310,000–319,999	2
320,000–329,999	1
410,000–419,999	1
430,000–439,999	1X
Total	20

Median True Valuation, $230,000.
XDenotes First-Class Cities.

TABLE 18.

True Tax Rates in Fourth Class Districts of Twelve Typical Counties—1922.

True Tax Rate (Mills)	Clearfield	Crawford	Delaware	Forest	Fulton	Lancaster	Luzerne	Northampton	Pike	Sullivan	Tioga	Washington	Total
3– 3.99	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	2	6
4– 4.99	.....	.....	.....	.....	.....	6	.....	.....	.....	.....	.....	1	7
5– 5.99	.....	1	.....	.....	1	3	1	1	.....	.....	.....	2	9
6– 6.99	.....	2	1	.....	2	5	.....	1	1	2	.....	1	15
7– 7.99	.....	3	2	.....	.....	2	1	2	1	.....	.....	3	14
8– 8.99	1	.....	.....	2	.....	.....	1	1	1	.....	1	1	8
9– 9.99	1	1	.....	1	.....	.....	.....	.....	.....	1	.....	.....	4
10–10.99	1	5	.....	.....	2	.....	1	1	.....	.....	1	.....	11
11–11.99	.....	.....	.....	.....	.....	.....	.....	1	1	.....	1	1	4
12–12.99	2	1	.....	1	.....	.....	3	.....	.....	.....	1	1	9
13–13.99	.....	1	.....	.....	1	.....	.....	.....	.....	.....	1	.....	3
14–14.99	1	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	3
15–15.99	1	2	.....	1	.....	.....	1	.....	.....	1	2	.....	8
16–16.99	1	.....	1	.....	.....	.....	1	.....	.....	.....	.....	1	4
17–17.99	.....	.....	1	.....	.....	.....	1	1	.....	.....	.....	.....	3
18–18.99	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	4
19 and over	.....	.....	2	.....	.....	.....	.....	.....	.....	1	1	.....	4
Total.....	10	17	7	5	6	20	10	8	4	6	8	15	116

Median True Tax Rate 8.9.

TABLE 19.

True Tax Rates of All Third Class Districts in Twelve Typical Counties—1922.

True Tax Rate (Mills)	Clearfield	Crawford	Delaware	Forest	Fulton	Lancaster	Luzerne	Northampton	Pike	Sullivan	Tioga	Washington	Total
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
4	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
5	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	2
6	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	2
7	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	2
8	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
9	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	2
10	1	1	1	.....	.....	.....	1	.....	.....	.....	.....	.....	4
11	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	2
12	1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	3
13	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
15	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
16	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	3	2	6	.....	.....	.....	8	3	.....	.....	.....	3	25

Median True Tax Rate 9.7 mills.

TABLE 20.

TRUE TAX RATES IN ALL FIRST AND SECOND CLASS CITIES—1922.

True Tax Rate (Mills)	First and Second Class Cities
4– 4.99	1
5– 5.99	..
6– 6.99	..
7– 7.99	3
8– 8.99	3
9– 9.99	2
10–10.99	2
11–11.99	1
12–12.99	2
13–13.99	..
14–14.99	..
15–15.99	1
Total	15

Median True Tax Rate 9.2.

These tables show the same wide range as in the case of true valuations per teacher and also the same differences between counties. The positions of the counties are, however, reversed from what they were in the table of true valuations inasmuch as districts with low valuations must, in order to maintain the same type of school, have a higher tax rate than districts with higher valuations.

The second condition for an efficient system of General Aid given above was that the amount of state aid should be made dependent upon the effort of local districts to support good schools as revealed by their tax rates. Many differences shown in the tax rates in Tables 18,19 and 20 (pages 52 and 53) are due to the differences in the values of property. Districts having the same amounts of taxable wealth behind each teacher show varying tax rates, as may be seen from Tables 21 and 22 (pages 54 and 55) for fourth and third class districts respectively. These differences in tax rates are due, in a large measure, to the ideas of the people residing therein as to the standard of schools that should be maintained.

TABLE 21.

The Relationship Between the True Valuations per Teacher and the True Tax Rate in Typical Fourth Class Districts of Twelve Typical Counties, 1921-22.

True Valuation per Teacher	True Tax Rate in Mills.																					Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22 & over	
$ 0,000– 9,999													1										1
10,000– 19,999				1			1																2
20,000– 29,999								1						1								1	3
30,000– 39,999					1		1						1	1									4
40,000– 49,999					1	1									2	1					1	1	7
50,000– 59,999					1		1		1	4		1	2		2	1							13
60,000– 69,999							1	1		2		1		1	1	1							8
70,000– 79,999						1	1	2		4		2										1	11
80,000– 89,999						1	1	1			1					1							5
90,000– 99,999							1	1		2	1						1					1	7
100,000–109,999						3						1											4
110,000–119,999						2	2	1			1			1	1								8
120,000–129,999				1	1		1	1							1								5
130,000–139,999					1	1					1												3
140,000–149,999					2	2									1				2				7
150,000–159,999				1	2		1																4
160,000–169,999													1										1
170,000–179,999							1																1
180,000–189,999											1												1
190,000–199,999																							
200,000–209,999			1																				1
210,000–219,999				1																			1
220,000–229,999				1			1		1														3
230,000–239,999					1																		1
240,000–249,999							1																1
250,000–259,999																							
260,000–269,999					1			1					1										3
280,000–289,999																		1					1
290,000–299,999																							
300,000–309,999							1																1
310,000–319,999																							
320,000–329,999																							
330,000–339,999																							
340,000–349,999						1										1							2
350 and over			2				1		1								1						5
Total			3	5	11	12	16	9	3	12	5	4	7	4	8	5	2	1	2		1	4	114

Median True Realty $94,285.
Median True Tax Rate 9.3 mills.

TABLE 22.

RELATIONSHIP BETWEEN THE TRUE VALUATION PER TEACHER AND THE TRUE TAX RATE IN ALL THIRD CLASS DISTRICTS OF TWELVE TYPICAL COUNTIES, 1921-22.

True Valuation Per Teacher	TRUE TAX RATE IN MILLS																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
70,000– 79,999	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
80,000– 89,999	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
90,000– 99,999	...	...	...	...	...	...	...	1	...	1	1	...	...	...	...	...	3
100,000–109,999	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
110,000–119,999	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.....
120,000–129,999	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
130,000–139,999	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.....
140,000–149,999	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
150,000–159,999	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.....
160,000–169,999	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.....
170,000–179,999	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
180,000–189,999	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
210,000–219,999	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
220,000–229,999	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.....
230,000 and over	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	2
Total.....	...	...	...	...	1	1	1	3	...	3	2	2	...	...	...	...	13

Median True Valuation $125,000.
Median True Tax Rate 10.1 mills.

Such differences will always exist. If an efficient system of state aid were put into effect and all districts of lower average valuation per teacher should be put upon the same financial footing, they would vary greatly among themselves in their interest in schools and in the amounts of money that they would choose to put into them. Some districts would be parsimonious and run as cheap schools as the law would permit, while others would employ superior teachers, provide them with first-class equipment and supplies, introduce provisions for sanitation and health, for recreation and play, for developing the æsthetic and dramatic abilities of children and such other features of the modern school as would provide a superior quality of education for their children. All of these additional provisions would increase the cost of the school and would require higher tax rates than those for the districts with lower educational ideals. Such efforts should be rewarded by special state aid.

The state is suffering greatly today from the effects of poor schooling in hundreds of districts—inferior teaching, short terms, early dropping out of school, poor equipment, unpleasant surroundings, meagre high school facilities, etc., due to lack of interest

upon the part of the people as well as to the low valuations. It is believed that it is to the interest of the state to encourage such districts to improve their educational facilities in order that their children may have a better preparation for life. This may be done by adjusting the amount of state aid to the efforts made by local districts to furnish such superior education as well as to the valuation of their taxable property. Merely to place districts upon the same financial footing does not offer a stimulus to such districts to improve. Furthermore, it is important to the state as a whole that the more progressive districts be encouraged in their educational development because, as results of such efforts extend out among the less progressive districts in their influence, they serve as examples to be followed. It is not possible to secure the most consistent and efficient progress in a decentralized educational system such as we have in America, unless we take care that both the backward and progressive districts are constantly kept up to their best efforts.

Details of the Plan of General Aid.

The significance of the facts that have been revealed above is that a system of state General Aid should be devised for Pennsylvania which will, in the distribution of state school money, give to districts in inverse proportion to their "ability" to support schools as shown by their deficiencies in true valuations per teacher, and on the other hand in direct proportion to the amount of effort they make to support schools as shown by their true tax rates. While this should be the basic idea of the system of state support, it should at the same time be so administered as to insure the maintenance of proper standards as to qualifications of teachers and types of equipment. This can be realized by making the amounts granted dependent upon the maintenance, by local authorities, of such standards as established by the State Legislature or other central agency.

Such a plan, based upon equalized rates determined by a State Tax Commission or Tax Commissioner, has recently been formulated for the state of New York and has received the approval of the grange and of the Committee of 21 representing the state and is now being seriously proposed for adoption by the next Legislature. This provides that the amounts of General Aid which a district shall receive will depend upon the product of three fac-

tors; viz., its deficiency in equalized valuation per teacher below a standard that is established in accordance with a scientific study of conditions in that state, the equalized tax rate and the number of teachers. Tables have been prepared which facilitate the working of the plan so that it is possible for local school board members to know in advance the amount of money they will receive from the state as soon as their plans for the coming year have been formulated.

Its Operation in Pennsylvania.

In order to show how such a plan for General Aid would work out in Pennsylvania, Table 23 (pages 60 and 61) has been prepared. It shows the amount that would be given by the state for each teacher in districts classified according to (1) their expenses per teacher, and (2) true valuation per teacher. For example, a district which has an interest in schools measured by a current expense of $1,110 per teacher and a valuation of $50,000 per teacher would meet its expenses by a levy of a 6 mill tax bringing in $300 and by a state grant of $810 per teacher.

It will be noticed that every district having a valuation of less than $185,000 per teacher can support schools costing $1,110 per teacher on a 6 mill tax, the amount of state aid in each district being the difference between the proceeds of a 6 mill tax in such districts and $1,110. Similarly, all other districts having a valuation of less than $1,850 per teacher may have a school costing $1,295 per teacher with a levy of a 7 mill tax, or a school costing $1,480 per teacher with a levy of an 8 mill tax. According to this plan, therefore, all districts with the same standards as to what constitutes a good school, having a valuation of less than $185,000 per teacher are by this scheme of complementary state aid placed upon an equal footing, *viz.*, the financial position in which the $185,000 district is placed. Thus, it is possible for a rural district to have as good a school as a city with the levy of the same tax rate. This has the effect of making equal opportunity possible for all the children of the state in a way which heretofore has not existed and of stimulating districts to take advantage thereof, inasmuch as it enables all of these districts to have the same amounts of money available for current expenses upon the levy of the same tax rate. These figures are illustrated in Diagram 5.

The question naturally arises why the valuation of $185,000 per teacher was chosen as the equalization point. It has been estimated by carefully extended inquiry that the true valuation of property taxable for schools in Pennsylvania, according to the data from the secretaries of the Boards of Education, was in the year 1921, $8,318,130,000. The number of teachers in the state for the same year was 45,485. The first figure divided by the second gives the quotient $185,031 as the true valuation per

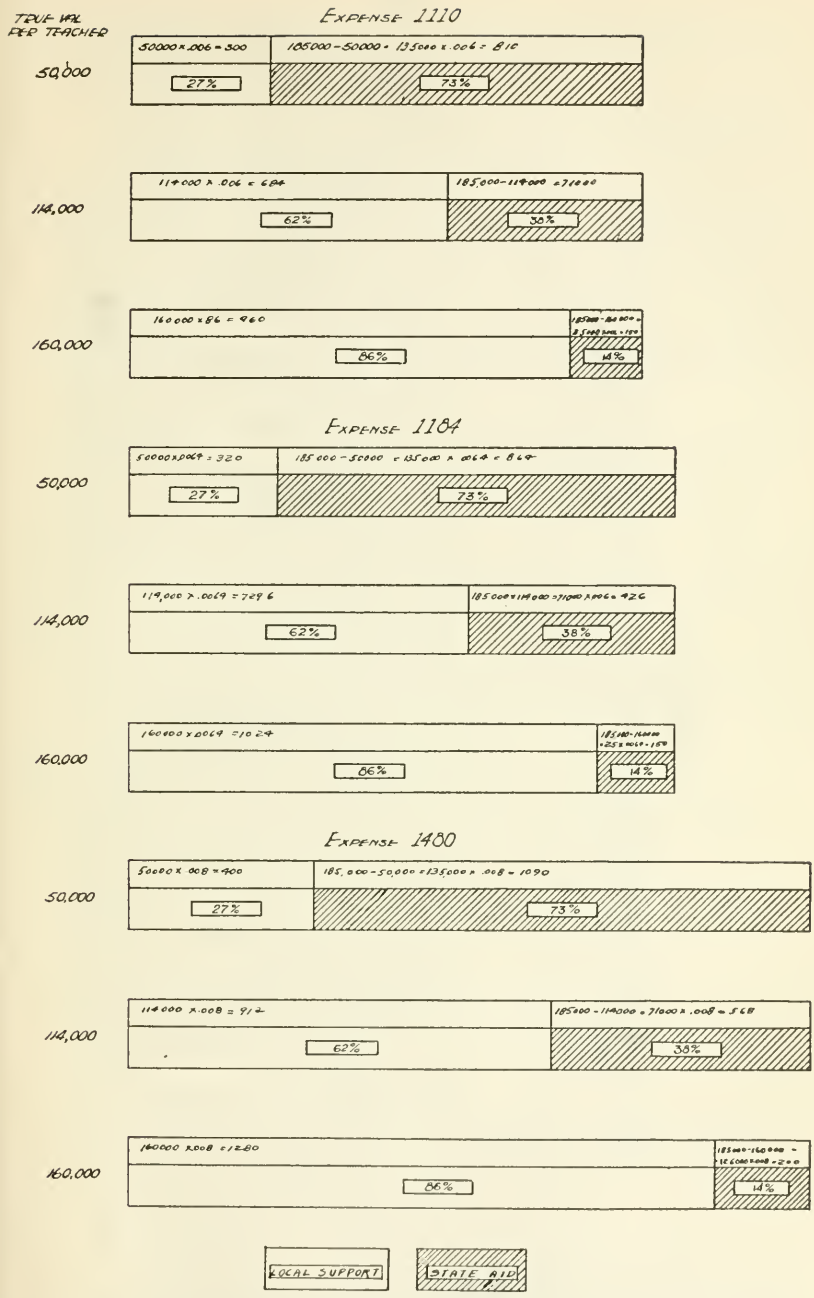


DIAGRAM 5.—AMOUNTS OF LOCAL SUPPORT AND AMOUNTS OF STATE AID DISTRICTS WILL RECEIVE FROM THE STATE BASED ON THEIR TRUE VALUATION PER TEACHER AND CURRENT EXPENSE PER TEACHER.

TABLE 23.

Amounts of State Aid Districts of Varying Equalized Valuations Will Receive for Each Mill Levied and Amounts of Local Support Required.

Amount to be spent per teacher for current expenses	$740		$925		$1110		$1295		$1480		$1665		$1850		$2035		$2220		$2405		$2590	
Mills Necessary to levy	4 Mill tax		5 Mill tax		6 Mill tax		7 Mill tax		8 Mill tax		9 Mill tax		10 Mill tax		11 Mill tax		12 Mill tax		13 Mill tax		14 Mill tax	
True valuations per teacher	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid
$ 5,000	20	720	25	925	30	1080	35	1260	40	1440	45	1620	50	1800	55	1980	60	2160	65	2340	70	2520
15,000	60	680	75	850	90	1020	105	1190	120	1360	135	1530	150	1700	165	1870	180	2040	195	2210	210	2380
25,000	100	640	125	800	150	960	175	1120	200	1280	225	1440	250	1600	275	1760	300	1920	325	2080	350	2240
35,000	140	600	175	750	210	900	245	1050	280	1200	315	1350	350	1500	385	1650	420	1800	455	1950	490	2100
45,000	180	560	225	700	270	840	315	980	360	1120	405	1260	450	1400	495	1540	540	1680	585	1820	630	1960
55,000	220	520	275	650	330	780	385	910	440	1040	495	1170	550	1300	605	1430	660	1560	715	1690	770	1820
65,000	260	480	325	600	390	720	455	840	520	960	585	1080	650	1200	715	1320	780	1440	845	1560	910	1680
75,000	300	440	375	550	450	660	525	770	600	880	675	990	750	1100	825	1210	900	1320	975	1430	1050	1540
85,000	340	400	425	500	510	600	595	700	680	800	765	900	850	1000	935	1100	1020	1200	1105	1300	1190	1400
95,000	380	360	475	450	570	540	665	630	760	720	855	810	950	900	1045	990	1140	1080	1235	1170	1330	1260
105,000	420	320	525	400	630	480	735	560	840	640	945	720	1050	800	1155	880	1260	960	1365	1040	1470	1120
115,000	460	280	575	350	690	420	805	490	920	560	1035	630	1150	700	1265	770	1380	840	1495	910	1610	980
125,000	500	240	625	300	750	360	875	420	1000	480	1125	540	1250	600	1375	660	1500	720	1625	780	1750	840

TABLE 23.—Concluded

Amounts of State Aid Districts of Varying Equalized Valuations Will Receive for Each Mill Levied and Amounts of Local Support Required.

Amount to be spent per teacher for current expenses	$740		$925		$1110		$1295		$1480		$1665		$1850		$2035		$2220		$2405		$2590	
Mills Necessary to levy	4 Mill tax		5 Mill tax		6 Mill tax		7 Mill tax		8 Mill tax		9 Mill tax		10 Mill tax		11 Mill tax		12 Mill tax		13 Mill tax		14 Mill tax	
True valuations per teacher	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid
$135,000	540	200	675	250	810	300	945	350	1080	400	1215	450	1350	500	1485	550	1620	600	1755	650	1890	700
145,000	580	160	725	200	870	240	1015	280	1160	320	1305	360	1450	400	1595	440	1740	480	1885	520	.....	560
155,000	620	120	775	150	930	180	1085	210	1240	240	1395	270	1550	300	1705	330	.....	360	.....	390	.....	420
165,000	660	80	825	100	990	120	1155	140	1320	160	1485	180	1650	200	.....	303	.....	341	.....	379	.....	417
175,000	700	40	875	50	1050	60	1225	70	1400	80	.....	155	.....	187	.....	276	.....	322	.....	368	.....	414
185,000	.....	36	.....	45	.....	54	.....	63	.....	72	.....	125	.....	174	.....	250	.....	304	.....	357	.....	411
195,000	.....	32	.....	40	.....	48	.....	56	.....	64	.....	100	.....	162	.....	223	.....	285	.....	346	.....	408
205,000	.....	28	.....	35	.....	42	.....	49	.....	56	.....	76	.....	138	.....	200	.....	261	.....	323	.....	385
215,000	.....	28	.....	35	.....	42	.....	49	.....	56	.....	73	.....	115	.....	177	.....	238	.....	300	.....	362
225,000	.....	28	.....	35	.....	42	.....	49	.....	56	.....	70	.....	92	.....	153	.....	215	.....	277	.....	339
235,000	.....	28	.....	35	.....	42	.....	49	.....	56	.....	66	.....	86	.....	130	.....	192	.....	253	.....	315
245,000	.....	28	.....	35	.....	42	.....	49	.....	56	.....	63	.....	81	.....	107	.....	168	.....	230	.....	292
255,000	.....	28	.....	35	.....	42	.....	49	.....	56	.....	63	.....	76	.....	83	.....	145	.....	207	.....	268
265,000	.....	28	.....	35	.....	42	.....	49	.....	56	.....	63	.....	70	.....	79	.....	121	.....	183	.....	245
275,000	.....	28	.....	35	.....	42	.....	49	.....	56	.....	63	.....	70	.....	75	.....	98	.....	160	.....	222
285,000	.....	28	.....	35	.....	42	.....	49	.....	56	.....	63	.....	70	.....	71	.....	75	.....	137	.....	198
295,000	.....	28	.....	35	.....	42	.....	49	.....	56	.....	63	.....	70	.....	67	.....	74	.....	113	.....	175
305,000	.....	24	.....	30	.....	36	.....	42	.....	48	.....	54	.....	60	.....	66	.....	73	.....	90	.....	152
355,000	.....	24	.....	30	.....	36	.....	42	.....	48	.....	54	.....	60	.....	66	.....	72	.....	78	.....	111
405,000	.....	20	.....	25	.....	30	.....	35	.....	40	.....	45	.....	50	.....	55	.....	60	.....	65	.....	70
455,000	.....	20	.....	25	.....	30	.....	35	.....	40	.....	45	.....	50	.....	55	.....	60	.....	65	.....	70
505,000	.....	16	.....	20	.....	24	.....	28	.....	32	.....	36	.....	40	.....	44	.....	48	.....	52	.....	56
605,000	.....	12	.....	15	.....	18	.....	21	.....	24	.....	27	.....	30	.....	33	.....	36	.....	39	.....	42
705,000	.....	8	.....	10	.....	12	.....	14	.....	16	.....	18	.....	20	.....	22	.....	24	.....	26	.....	28
805,000	.....	4	.....	5	.....	6	.....	7	.....	8	.....	9	.....	10	.....	11	.....	12	.....	13	.....	14

teacher. Thus, the effect of the plan is to place all schools representing valuations below the average on the same plane as the school at the average valuation, $185,000. This may then be called the Standard True Valuation per teacher.

Each true valuation has its corresponding percentage quota. There is another feature of this table which is of particular importance because it furnishes a method for short, simple computation of the amount of aid that a district will receive. It will be noticed that for any valuation in Table 23 the amount of state aid given in any column is always the same proportion of the total expense given at the head of the column. Thus any districts with a valuation per teacher of $50,000 will receive from the state twenty-seven percent of its total expenses for each teacher, no matter which column is taken. In the same way in which there is a percentage for a true valuation per teacher of $50,000, so there is a percentage for each of the true valuations shown in the table and for all others that lie between them. The percentage for a deficiency in true valuation per teacher of $1,000 would be one hundred one hundred eighty-fifths (100/185 or 20/37) percent. The percentage for any given thousand as $135,000 is this fraction multiplied by the number of thousands of deficiency in question (20/37 x 35 = 73). Diagram 5 serves to make clear these points.

It remains to explain the amounts given districts with a valuation of above $185,000. These amounts are fixed arbitrarily and are given on the ground that it is a wise financial policy for the state to grant some aid to every district, irrespective of its valuation and tax rate. The amounts, however, decrease as the valuations increase. The plan is so arranged also that as a city of any given valuation increases its tax within the limit of a given maximum, the amount of state aid will also increase.

On the right side of Table 23, midway between the upper and lower ranges of valuations, is a blocked off portion. The amounts contained therein are much larger, it will be noticed, than those that would be there if the method followed with the lower tax rates had been extended through to the higher tax rates. The increased amounts are rewards to districts levying a higher tax rate than 8 mills and spending more than $1,480 per teacher for current expenses. The figures represent one-third of the difference between the proceeds of the tax given at the head of the respective

columns and $1,480. This is done in order to stimulate districts in the higher range of valuations to carry out new ideas, the benefit of which will extend to the entire state by the retention and spread of those methods that are found to be the most efficient.*

A close examination of the amounts shown above and below in this block will show that certain readjustments have been made in order to make the application of the principles more uniform.

Thus, according to this plan, every district in this state having a valuation above the standard equalized valuation of $185,000 will receive a substantial reward from the state for developing its school to an unusual order of excellence. The benefit to the state from this progress upon the part of such school districts is sufficient recompense for the expenditure.

Approximately 54 percent of the teachers of the state are in the fourth class districts; of these 75 percent are in districts having a valuation below $180,000. Approximately 16 percent are in the third class districts and of these approximately 70 percent are in the range below $180,000. About 11 percent are in the second class districts, but not more than one-quarter of them are in the districts having valuations below $180,000. All of the teachers in the first class districts, approximately 19 percent of the total, are in the upper range of valuation, Pittsburgh having a valuation of $302,125 per teacher and Philadelphia a valuation of $439,361 per teacher.

*Figures in this blocked off portion of the table are based in error on 7 mills instead of 8 mills.

Maintenance of Standards Under Such a Plan of General Aid.

In order to maintain proper standards in the local schools under this plan of General Aid it is recommended that these provisions be incorporated:

1. AVERAGE DAILY ATTENDANCE.—In order to encourage regular attendance in school it is recommended that the State Department of Public Instruction be empowered to establish annually a percent of average daily attendance which must be maintained by the different classes of districts in order to receive the full amount indicated in the above table and that for each percent of the average daily attendance falling below such standard the amount of state aid granted be reduced one-tenth.
2. SALARIES OF TEACHERS.—That maximum salaries be fixed for teachers having qualifications less than graduation from the State Normal Schools or the equivalent thereof for which state aid will be granted.
3. EXPENSES OF OPERATION AND MAINTENANCE.—That standard unit costs per teacher be established for both operation and maintenance for which state aid will be given. These standards should be based upon a careful study of the practice of typical school districts. The districts should be grouped for this purpose in such a way as will best promote the efficiency of the schools.
4. EXTENT OF AID.—That a maximum amount for teachers' salaries and for other expenses be fixed up to which the state will not give aid.

Difficulties of Incorporating the Plan in the Edmonds Act.

Proposed State Tax Commission—Present Method of Determining Rates of Assessment.

The great difficulty, although not an insurmountable one, in the adoption of this plan in this state is the absence of some such body as a State Tax Commission or Revenue Commissioner with authority to ascertain the rates of assessment of property that have been used in the assessment of property by the local assessors in the various counties and also in the various townships within the counties.

It is not necessary, however, to await the passage of further legislation in order to put into effect the "Ability and Effort Plan" herein outlined for General Aid. For the past six or seven years officers of the various school districts in the state have reported the assessed valuation of property taxable for schools within their districts, the rate of assessment or the percent of the true value at which the property was taxed, and the number of mills levied.

It is believed that these figures furnished by the school secretaries give sufficiently reliable data to make them the basis of a distribution system for a period of the next six or eight or possibly ten years, by which time it will be possible to put through the desired revision in the taxable system of the state, or failing in that, so to test out the distribution of state aid under the plan herein recommended as to be able to say whether it should be continued, modified or abandoned. While it is not at all improbable that the plan might be continued, nevertheless, even if it is necessary to abandon it, the schools will have received considerable benefit during the period covered.

The truth or the falsity of the above conclusion rests upon the reliability of the assessment rates as reported by the secretaries of the Boards of Education to the Superintendent of Public Instruction. Two classes of studies have been made of these assessment rates; first, as regards their uniformity through a period of years, and second, as regards their reliability as tested out in an actual field study. Tables 24 and 25 (page 66) show the average deviation in the rates of assessment during the past three years, 1920-21-22, for selected third and fourth class districts in the state, respectively. It will be noted that in each of these tables over one-half of the districts reported exactly the same rates of assessment for each of the three years and that in three-quarters of the districts the variation was not more than 6 percent in the fourth class districts and in the first and second districts not over 4 percent.

TABLE 24.

Average Deviations in the Rates of Assessment for Three Years, 1920-21-22, in Typical Third and Fourth Class Districts of Typical Counties.

Deviations	Clearfield	Crawford	Delaware	Forest	Fulton	Lancaster	Luzerne	Northampton	Pike	Sullivan	Tioga	Washington	Total
0	6	14	9	1	2	14	16	8	5	4	7	13	99
.1– .99	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1
1– 1.99	1	.....	1	.....	.....	1	.....	.....	.....	.....	1	.....	4
2– 2.99	2	.....	.....	.....	.....	4	3	1	.....	1	2	1	14
3– 3.99	2	.....	.....	.....	.....	.....	.....	.....	1	1	1	.....	5
4– 4.99	2	1	.....	1	.....	1	.....	.....	.....	.....	.....	2	7
5– 5.99	2	.....	1	.....	.....	1	3	1	.....	.....	.....	.....	8
6– 6.99	.....	.....	2	.....	.....	.....	.....	1	.....	.....	.....	3	6
7– 7.99	1	.....	1	1	.....	1	1	1	.....	.....	.....	1	7
8– 8.99	1	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	3
9– 9.99	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	3
10–10.99	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1
11–11.99	.....	1	.....	.....	.....	.....	.....	.....	.....	1	1	1	4
12–12.99	.....	1	1	.....	1	.....	.....	2	.....	.....	.....	.....	5
13–13.99	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	2
14–14.99	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1
15–15.99	1	1	.....	.....	2	.....	.....	.....	.....	.....	.....	1	5
16–16.99	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
17–17.99	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1
18–18.99	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1
19–19.99	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1
20 & over	.....	1	1	.....	.....	.....	.....	.....	.....	.....	1	1	4
Total.....	18	20	16	5	6	23	25	17	6	7	14	25	182

Median Deviation 0.

TABLE 25.

Average Deviation in the Rates of Assessment for Three Years, 1920-21-22, in all First and Second Class Cities.

Deviations	First and Second Class Cities
0	11
1– .99	..
1– 1.99	..
2– 2.99	2
3– 3.99	1
4– 4.99	1
5– 5.99	1
6– 6.99	..
7– 7.99	..
8– 8.99	..
9– 9.99	3
10–10.99	..
11–11.99	..
12–12.99	1
Total.....	20

Median Deviation 0.

TABLE 26.

Distribution of Average Deviation in Rates of Assessment for Five Years, 1917-19-20-21-22, in Typical Third and Fourth Class Districts.

Deviations	Clearfield	Crawford	Delaware	Forest	Fulton	Lancaster	Luzerne	Northampton	Pike	Sullivan	Tioga	Washington	Total
0	.....	5	.....	.....	.....	10	.....	2	3	2	.....	4	26
1- .99	1	1	.....	.....	.....	.....	.....	1	1	.....	.....	.....	4
1- 1.99	.....	1	.....	.....	.....	5	.....	1	.....	1	2	2	12
2- 2.99	1	1	1	.....	.....	.....	1	.....	.....	1	1	.....	6
3- 3.99	1	2	1	.....	.....	1	2	.....	1	1	2	2	13
4- 4.99	.....	1	.....	.....	.....	1	1	2	2	.....	.....	.....	7
5- 5.99	1	2	3	.....	.....	1	1	1	.....	.....	1	1	11
6- 6.99	1	.....	.....	1	.....	1	.....	1	.....	.....	.....	3	7
7- 7.99	.....	.....	2	2	1	1	1	1	.....	.....	.....	1	9
8- 8.99	.....	3	1	.....	.....	.....	.....	.....	.....	.....	.....	1	5
9- 9.99	2	1	1	1	2	.....	2	1	.....	.....	.....	2	12
10-10.99	.....	1	1	.....	.....	1	2	1	.....	1	1	3	11
11-11.99	2	.....	1	.....	1	1	1	2	.....	.....	1	.....	9
12-12.99	1	1	.....	.....	.....	.....	.....	1	1	.....	.....	.....	4
13-13.99	1	.....	.....	.....	.....	.....	1	.....	.....	.....	1	2	5
14-14.99	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	2
15-15.99	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	2
16-16.99	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
17-17.99	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	2
18-18.99	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
19-19.99	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1
20-20.99	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	2
24-24.99	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
25-25.99	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	2
Total.....	14	20	11	5	5	22	14	15	8	7	10	24	155

Median Deviation 5.8.

The years represented in Tables 24 and 25 constitute a period covered by a triennial assessment. In order to show the extent of variation in assessment rates between triennial periods, Table 26 has been prepared. This shows the deviation in rates of assessment in selected third and fourth class districts in twelve counties over a five-year period, 1917-22. While only one-sixth of the districts recorded the same rate of assessment for each of the five years, one-half of the districts show a variation of less than 6 percent.

From these figures the inference may be fairly drawn that the school secretaries did not pursue a hit or miss policy in reporting the rates of assessment. In most communities of the state there is a generally accepted rate of assessment known to all citizens who have some part in the taxation of property and to most owners of property. The secretaries of the Boards of Education have as one of their duties the making of a transcript of the assessment roll

as reported by the Board of County Commissioners. They are, therefore, probably as well acquainted with the actual assessment as any one person except possibly the assessors and are, therefore, competent to express a common-sense opinion as to what these rates of assessment are. The uniformity shown in the above tables warrants the inference that in practically all cases the secretaries of the Boards of Education report these commonly known rates of assessment. They are believed to be reasonably accurate statements of the rates of assessment used in their districts, although not so accurate as would be determined by a regularly constituted authority as a Revenue Commissioner or a Tax Commissioner using more exact methods.

The second type of study of rates of assessment was made by Principal Charles H. Fisher, of the Bloomsburg State Normal School, in the year 1918-1919, during the time when he was Professor of Education at the West Chester State Normal School. An extract from this paper, based upon a careful study in which many different persons as well as records of sales of property were consulted, is given herewith.

"As a result of this checking, the rates of the fourteen boroughs were left unchanged. Out of a total of fifty-nine townships one low assessment of 30 percent was increased and eleven high rates of assessment were decreased, while the rest were left unchanged. It is evident that there is a tendency to report the rates of assessment too high rather than too low. In the case of twelve districts out of seventy-three, or about one-sixth of all the districts, the rates of assessment were changed. The extent of the variation in the correlated rates of assessment is so small that one is warranted in drawing the conclusion that the rate of assessment is a dependable figure to use in such a study. The writer is willing to go further and say, that from the standpoint of this one county, the rate of assessment would be a dependable figure to use in making the computations upon which to grant state aid for schools. This figure could be made useful throughout the state by giving authority to a State Tax Commission or the State Board of Education to investigate and correct rates of assessment. Compared with the school census, which is used in this state as one of the two bases for state aid, the rate of assessment could be used to determine a basis for state aid that would probably be more equitable

according to the need, ability and effort of school districts to support schools."*

It is believed that these facts regarding uniformity and the close correspondence of the rates of assessment as reported in Chester County would go to show that these rates of assessment can be used as a basis of distribution in the absence of a State Tax Commission or a State Revenue Commissioner. While there is a fairly wide departure from actual valuations in the case of 25 percent of the school districts, this situation is not so bad as under existing conditions in which fully 50 percent of the districts receive an amount considerably larger or smaller than they need in order to conduct efficient schools.

Although it is believed that the facts presented above are sufficient warrant for the conclusion stated, nevertheless it is realized that it would probably be a good plan to extend the study made by Principal Fisher to other counties. Such studies could, if necessary, be made in a period of a few weeks and the results would help to establish or controvert the statement just made.

Inasmuch as the figures already in the office of the State Superintendent of Public Instruction have been submitted without thought of their being used in the distribution of state school funds, it would seem that these data could be used in the proposed plan of state aid.

Certain difficulties would be encountered by using the rates of assessment for each preceding year, but it is believed that the rates as they have been reported in the last few years could be used for a period of from six to ten years in the immediate future. In all probability if this plan were adopted it would have the effect of fixing the rates of assessment of property during this entire period. If that were the case the plan might then be continued for a number of years in advance in the event that an amendment was not made in the state taxation system.

SUMMARY.—It is recommended, therefore:

1. That a revision in the state taxation system be made such as will provide for state-wide evaluation of assessment rates through such an agency as a State Tax Commission or a State Revenue Commissioner.

*Schoolmen's Week Proceedings, 1919, University of Pennsylvania, page 255.

2. That if this cannot be secured, the figures reported to the State Department of Public Instruction in the annual district reports be used as bases in the determination of true valuation and tax rates in the carrying out of a revised plan of General Aid based upon the "ability" of, and the "effort" made by the local districts in the support of schools.

Rough Draft of the Essential Provisions That Should be Included in a Law Establishing General Aid.

Section 1. The terms used in this act shall be understood as having the meanings hereby given them as follows:

(a) The STATE STANDARD TRUE VALUATION per teacher shall be the total true valuation of property taxable for schools in all the school districts of the state for the year preceding divided by the total number of teachers in all the public schools of the state. The true valuation of the property taxable for schools shall be determined by a State Tax Commission or State Revenue Commission. If such body is not created, it shall be determined by the State Superintendent of Public Instruction, based upon computation of data submitted by the officers of the school districts in their annual reports to the State Superintendent of Public Instruction.

(b) The true valuation per teacher of any district shall be the true valuation for that district divided by the number of full time teachers employed for the preceding year, including principals, supervisors and superintendents, but excluding principals and teachers receiving national grants under the Smith-Hughes Act. The true valuation of the taxable property for any district shall be determined by dividing the amount of its assessed valuation for the year preceding by the rate of equalization as determined for the same year by the State Tax Commission. If such a body is not created the true valuation per teacher for any district shall be determined by the State Superintendent of Public Instruction based upon computation of data submitted by the officers of the school districts in their annual reports to the State Superintendent of Public Instruction. The true valuation of the taxable property shall be obtained by dividing the amount of the assessed valuation, certified in the annual report for the year preceding, by the average rate of assessment for the year 1919-20, 1920-21, 1921-22.

(c) The State Standard Percentage shall be one hundred percent divided by the number of entire thousands of dollars in the State Standard Equalized Valuation per teacher (100 $\frac{}{185}$ = $\frac{20 \text{ percent}}{37}$).

(d) The Percentage Quota of any district shall be the State Standard Percentage multiplied by the number of entire thousands of dollars that the districts Equalized Valuation per teacher is less than the State Standard Valuation per teacher.

(e) The Total Local Expenses of any district shall be the total current expenses less all forms of Special Aid and all gifts for current expenses.

Section 2. Any school district in the state having an equalized valuation per teacher less than the State Standard Equalized Valuation per teacher shall receive from the state such a proportion of its total local expenses for the preceding year (or of its expenses for teachers' salaries) as is indicated by its percentage quota, provided the minimum and maximum standards prescribed by law relative to schools are observed.

Section 3. Any school district in the state having for each full time teacher employed as large or a larger equalized valuation than the amount fixed as the State Standard Equalized Valuation per teacher shall receive from the state for each teacher as follows:

Districts having an equalized valuation of—

$185,000—	200,000	shall	receive	for	each	mill	levied	$8	for	each	teacher
200,000—	300,000	"	"	"	"	"	"	7	"	"	"
300,000—	400,000	"	"	"	"	"	"	6	"	"	"
400,000—	500,000	"	"	"	"	"	"	5	"	"	"
500,000—	600,000	"	"	"	"	"	"	4	"	"	"
600,000—	700,000	"	"	"	"	"	"	3	"	"	"
700,000—	800,000	"	"	"	"	"	"	2	"	"	"
800,000—	900,000	"	"	"	"	"	"	1	"	"	"
900,000 and over—											

Section 4. Any school district in the state having an annual expense per teacher of $xxxx or more and levying a tax for current expenses of $xxxx or more shall receive from the state at least one-third of the difference between the amount of its local support and $xxxx is times the number of teachers.

Section 5. State aid under the provision of Sections 2, 3 and 4 shall not be granted for teachers' salaries over and above $xxxx for each teacher employed, nor for any teacher teaching under a certificate of lower grade than a Normal School or standard certificate at a salary exceeding $100 per month. Grants shall be made for expenses other than teachers' salaries only in those districts having a true valuation per teacher employed of less than $90,000; such grants shall not be over and above 25 percent of the amount expended for teachers' salaries.

The Massachusetts Law.

Objection will possibly be made to this proposed bill on the ground of lack of clearness as to its meaning. Great care has been made to give as simple a statement as possible of the conditions that should govern and, at the same time, meet the demands of the complex situation existing in Pennsylvania. It seems impossible to attain efficiency in this particular and at the same time have as simple statements in the laws governing distribution of school funds as have existed in the past. In this connection it would be worth while to know the results of a similar effort in Massachusetts, which state in 1919, after a careful study of conditions, passed a law which is similar in its purpose to the measure proposed above. Only the essential paragraphs are quoted. It is believed that the law herein proposed is as simple as the statements of the Massachusetts Law which has been in effect for the past three years and which has been working satisfactorily. The central features of the law are as follows:

"*Section 3. For each person employed for full-time service for the entire school year as teacher, supervisor, principal, assistant superintendent, or superintendent of schools, the city or town shall be reimbursed as follows:

(1) Two hundred dollars for every such person who has received as salary not less than eight hundred and fifty dollars and who is a graduate of an approved normal school or college and has had at least two years' teaching experience or who possesses preparation and teaching experience accepted in lieu thereof.

(2) One hundred and fifty dollars for every such person, not included in the foregoing classification, who has received as salary not less than seven hundred and fifty dollars and (a) who has satisfactorily completed one year of professional training in an approved normal school or teachers' training school, and has had at least three years' of teaching experience; or (b) is a graduate of an approved normal school or college, and has had at least one year of teaching experience; or (c) who possesses preparation and teaching experience accepted in lieu of either of the foregoing requirements in this paragraph.

(3) One hundred dollars for every such person, not included in either paragraphs (1) or (2), who has received as salary not less than six hundred and fifty dollars."

"†Section 5. Every city or town in which the valuation of its real and personal property, including omitted assessments, for the city or town fiscal year next preceding the date of distribution, when divided by the net average membership of its public day schools, as defined in section six of this act, for the year ending on the thirtieth day of June next preceding the date of distribution, yields a quotient less than forty-five hundred dollars, shall receive supplementary reimbursements determined as follows:

For each person for whom the city or town received reimbursement for full-time service, in accordance with section three, the supplementary reimbursement shall be as follows:

(1) Three hundred dollars if said valuation per pupil is less than two thousand dollars.

(2) Two hundred and fifty dollars if said valuation per pupil is less than twenty-five hundred dollars but not less than two thousand dollars.

(3) Two hundred dollars if said valuation per pupil is less than three thousand dollars but not less than twenty-five hundred dollars.

(4) One hundred and fifty dollars if said valuation per pupil is less than thirty-five hundred dollars but not less than three thousand dollars.

(5) One hundred dollars if said valuation per pupil is less than four thousand dollars but not less than thirty-five hundred dollars.

(6) Fifty dollars if said valuation per pupil is less than forty-five hundred dollars but not less than four thousand dollars.

For each person for whom the city or town received reimbursement for part-time service, in accordance with section four, the supplementary reimbursement shall be such a fractional part of the corresponding supplementary reimbursement provided for full-time service as that service bore to full-time service."

*Massachusetts Educational Legislation Enacted in 1919, Bulletin of the Board of Education, 1919, No. 6, Whole No. 108, p. 30.

†Massachusetts Educational Legislation Enacted in 1919, Bulletin of the Board of Education, 1919, No. 6, Whole No. 108, pp. 30-31.

"*Section 10. For the purposes of Part II of this Act the following words and phrases shall be defined as follows:

"The word 'valuation' shall mean the valuation of the town, as determined by the last preceding assessors' valuation thereof, exclusive of omitted assessments.

"The word 'assured minimum' shall mean the amount by which the sum of the following items for the last preceding town fiscal year exceeded the amount received during that year, but that town under the provisions of Part I of this Act, and for the tuition of non-resident pupils, including state wards.

(1) Salaries paid during that year to principals and full-time teachers, not including any amounts by which any such salary was at a rate in excess of eight hundred and fifty dollars.

(2) Two hundred and fifty dollars for each teaching position occupied by one or more principals or full-time teachers for that year, to defray expenses of operation and of various other items in connection with the support of schools.

(3) The actual expenditures made during that year for the transportation of children to the schools of that town.

(4) The actual expenditures, if any, made during that year for the tuition and transportation of children to elementary schools in adjoining cities or towns.

"In determining the assured minimum, expenditures or allowances for state-aided vocational education shall not be included.

"*Section 11. Each town whose valuation is less than five hundred thousand dollars shall receive one half of the assured minimum in case the assured minimum is greater than the amount that would have accrued from a tax of ten dollars per thousand dollars valuation. If the assured minimum in such a town is less than the proceeds of such a ten dollar tax, but greater than the proceeds of a five dollar tax, the town shall receive the amount by which the assured minimum exceeds the proceeds of such a five dollar tax.

"*Section 12. Each town whose valuation is less than one million dollars but not less than five hundred thousand dollars shall be allotted one-third of the assured minimum in case the assured minimum is greater than the amount that would have accrued from a tax of seven and one-half dollars per thousand dollars of valuation. If the assured minimum in such a town is less than the proceeds of such tax of seven and one-half dollars, but greater than the proceeds of a five dollar tax, the town shall be allotted the amount by which the assured minimum exceeds the proceeds of such a five dollar tax. Said allotments shall be paid in full in case their sum does not exceed the amount available after making the payments provided for by section 11, otherwise they shall be reduced proportionally so much as may be necessary.

"*Section 13. Each town whose valuation is less than two million five hundred thousand dollars, but not less than one million dollars, shall be allotted one-half of the amount by which the assured minimum exceeds the amount that would have accrued from a tax of five dollars per thousand dollars of valuation. If

*Massachusetts Educational Legislation Enacted in 1919, Bulletin of the Board of Education, 1919, No. 6, Whole No. 108, pp. 32-33.

the sum of the said allotments exceeds the balance of the income of the fund available after the distribution provided for by sections eleven and twelve, then the treasurer and receiver-general shall add to said balance, from the proceeds of the income tax, the amount required, but shall not add more than two hundred thousand dollars in any one year. In any year in which the addition of said two hundred thousand dollars does not permit of the payment of said allotments in full, the treasurer shall add said two hundred thousand dollars and make the payments to the several towns proportional to their allotments."

Effects of Operation of "Ability and Effort Plan."

The effects of the operation of this Ability and Effort Plan in giving General Aid are shown in Table 27 (page 75) for fourth class districts in eight typical counties in widely scattered sections of the state. Some of these, such as Lancaster and Washington, are wealthy, others, such as Forest and Sullivan, are poor. Some of them are in farming regions, others in the mountains; some are agricultural centers and others are mining centers; some are well settled, others are sparsely settled. Table 28 (page 78) gives similar data for all third class districts and Table 29 (page 79) for all first and second class districts.

It will be noticed in looking over these tables that while the Edmonds Act gives increases in aid over and above that granted by the Woodruff Act in almost every instance, the amounts granted under the Ability and Effort Plan give certain districts less and others more and that there are many cases in which there are great differences in grants from those under the Edmonds Act.

If careful comparison is made of the amounts of these grants with the true valuations per teacher and the local tax rates that it would be necessary to levy it will be observed that low valuations and high tax rates each have the effect of raising the amounts of the grants, while high valuations and low tax rates each have the effect of lowering it. It follows that the largest grants are those in which there is a combination of low valuations and high tax rates and the smallest grants where there is a combination of high valuations and low tax rates.

TABLE 27.

Grants Under the Ability and Effort Plan Compared With the Grants Under the Woodruff and Edmonds Acts in Typical Fourth Class Districts of Clearfield County.

NAME OF DISTRICT	True valuation per teacher in thousands	True tax rate current expenses only (mills)	Current expense per teacher	Aid under Woodruff Act	Aid under Edmonds Act	Aid under Ability and Effort Plan
Bell Township	$117	6.01	$1,112	$175	$349	$ 407
Boggs Township	54	9.49	1,756	187	356	1,245
Brisbin Boro	84	6.89	1,272	264	333	695
Chest Township	52	6.45	1,193	240	396	758
Covington Township	54	6.09	1,126	272	390	798
Ferguson Township	44	4.59	849	158	300	637
Goshen Township	126	2.65	491	155	315	156
Greenwood Township	74	4.98	922	171	329	514
Huston Township	75	7.55	1,398	110	350	833
Karthans Township	65	5.46	1,011	182	379	661
Lumber City Boro	80	6.01	1,112	220	350	631
New Washington Boro	3	2.41	446	104	150	439
Pike Township	76	7.85	1,450	193	296	855
Ramey Boro	191	8.24	1,524	270	492	77
Wallaceton Boro	49	5.56	1,028	133	328	756

Fourth Class Districts of Delaware County.

NAME OF DISTRICT	True valuation per teacher in thousands	True tax rate current expenses only (mills)	Current expense per teacher	Aid under Woodruff Act	Aid under Edmonds Act	Aid under Ability and Effort Plan
Aldan Boro	$341	16.4	$3,045	$282	$475	$ 98
Birmingham Township	343	9.58	1,772	329	390	58
Collingdale Boro	295	13.5	2,610	294	674	94
Darby Township	285	12.6	2,330	298	513	88
Edgemont Township	35	9.5	1,760	206	413	1,427
Lower-Chichester	35	11.75	2,170	118	308	1,758
Middletown Township	275	10.7	1,977	268	420	74
Nether-Providence	430	10.5	1,940	228	594	53
Parkside Boro	384	13.8	2,544	....	879	83
Ridley Park Boro	95	11.9	2,206	157	538	1,075
Springfield Township	217	12.4	2,295	311	517	87

TABLE 27—CONTINUED.

FOURTH CLASS DISTRICTS OF FOREST COUNTY.

NAME OF DISTRICT	True valuation per teacher in thousands	True tax rate current expenses only (mills)	Current expense per teacher	Aid under Woodruff Act	Aid under Edmonds Act	Aid under Ability and Effort Plan
Barnett Township	$ 28	4.65	$ 855	$143	$287	$725
Harmony Township	63	6.07	1,125	250	375	743
Howe Township	164	7.57	1,400	300	400	159
Kingsley Township	52	5.4	1,000	250	415	720
Tionesta Township	120	6.7	1,250	250	500	446

FOURTH CLASS DISTRICTS OF FULTON COUNTY.

NAME OF DISTRICT	True valuation per teacher in thousands	True tax rate current expenses only (mills)	Current expense per teacher	Aid under Woodruff Act	Aid under Edmonds Act	Aid under Ability and Effort Plan
Ayr Township	$106	4.78	$ 885	$223	$333	$378
Bethel Township	87	4.65	860	143	287	455
Dublin Township	58	6.70	1,250	250	500	863
McConnelsburg	134	9.46	1,750	250	750	482
Thompson	65	3.87	715	143	429	463
Union Township	48	5.41	1,000	250	250	740

FOURTH CLASS DISTRICTS OF LANCASTER COUNTY.

NAME OF DISTRICT	True valuation per teacher in thousands	True tax rate current expenses only (mills)	Current expense per teacher	Aid under Woodruff Act	Aid under Edmonds Act	Aid under Ability and Effort Plan
Adamstown Boro	$ 91	7.55	$1,400	$250	$500	$ 813
Brecknock Township	74	5.06	937	183	366	563
Clay Township	132	5.65	1,045	200	800	299
Conay Township	100	6.07	1,125	183	366	154
Earl Township	237	5.85	1,085	200	333	41
East Dumore Township	116	6.14	1,135	223	333	460
East Lampeter Township	220	6.3	1,165	266	400	44
Elizabethtown Boro	117	7.42	1,370	250	500	689
Fulton Township	110	5.37	995	183	366	404
Lincoln Independent Boro	128	4.6	852	....	....	263
Manheim Boro	135	8.3	1,540	267	465	1,075
Marietta Boro	70	7.65	1,415	183	454	879
Mount Joy Township	209	6.27	1,160	231	385	44
New Millton Independent Boro	274	6.25	1,156	200	300	44
Paradise Township	142	5.9	1,090	187	375	253
Providence Township	142	5.68	1,049	250	375	242
Ladsbury Township	126	7.25	1,345	143	283	431
Strasburg Township	217	8.1	1,501	400	600	57
Warwick Township	150	6.58	1,218	177	412	231
West Donegal Township	153	6.78	1,252	250	375	235
West Lampeter Township	195	13.8	2,560	728	727	110

TABLE 27—Concluded.

Fourth Class Districts of Sullivan County.

NAME OF DISTRICT	True valuation per teacher in thousands	True tax rate current expenses only (mills)	Current expense per teacher	Aid under Woodruff Act	Aid under Edmonds Act	Aid under Ability and Effort Plan
Cherry Township	$ 52	6.05	$1,201	$238	$505	$ 886
Davidson Township	151	5.04	933	185	368	171
Eaglesmere Boro	144	6.61	1,223	233	400	272
Forks Township	41	7.35	1,357	129	409	1,047
Fox Township	57	4.82	895	206	439	620
La Porte Boro	22	6.05	1,119	200	380	986
Shrewsbury Township	34	6.00	1,110	225	439	906

Fourth Class Districts of Tioga County.

NAME OF DISTRICT	True valuation per teacher in thousands	True tax rate current expenses only (mills)	Current expense per teacher	Aid under Woodruff Act	Aid under Edmonds Act	Aid under Ability and Effort Plan
Bloss Township	$ 18	7.57	$1,400	$200	$416	$1,264
Charleston Township	99	14.6	2,700	500	700	853
Covington Township	484	.....	.....	3000	2000	.....
Duncan Township	45	6.2	1,150	200	400	871
Elkland Township	4	.....	.....	....	....	.....
Hamilton Township	37	6.47	1,200	200	400	961
Lawrence Township	79	6.2	1,150	200	400	660
Liberty Township	77	5.41	1,000	143	285	583
Morris Township	40	7.02	1,300	287	571	977
Putnam Township	24	8.1	1,500	166	500	1,020
Rutland Township	117	9.45	1,750	250	500	586
Tioga Boro	37	7.02	1,300	287	704	1,040
Ward Township	76	8.1	1,500	500	500	885
Westfield Township	64	6.75	1,250	250	333	818

Fourth Class Districts of Washington County.

NAME OF DISTRICT	True valuation per teacher in thousands	True tax rate current expenses only (mills)	Current expense per teacher	Aid under Woodruff Act	Aid under Edmonds Act	Aid under Ability and Effort Plan
Beallsville Boro	$221	9.85	$1,825	$236	$483	$ 69
Blaine Township	143	6.83	1,264	174	397	292
California Boro	223	9.54	1,775	252	488	67
Centerville Boro	269	9.54	1,765	282	414	67
Cokesburg Boro	37	7.84	1,450	137	435	1,160
Deemston Boro	405	6.27	1,160	239	360	31
East-Bethlehem Township	425	8.62	1,595	240	471	43
Elco Boro	59	7.86	1,455	268	400	991
Finleyville Boro	17	7.95	1,471	252	405	1,336
Houston Boro	144	12.15	2,247	259	450	498
Long-Branch Boro	159	8.12	1,502	248	320	211
Marianna Boro	140	8.89	1,645	219	419	540
Midway Boro	188	7.44	1,371	776	425	37
Murdocksville, Ind	13	4.32	799	146	300	744
North-Franklin	152	8.18	1,512	198	346	269
Peters Township	423	13.40	2,413	235	542	67
Somerset Township	562	9.26	1,713	179	372	37
Speers Boro	142	10.58	1,957	212	400	455
Union, Ind	461	7.57	1,400	198	300	38
West-Bethlehem	332	5.34	988	986	379	32
West-Middleton	52	6.25	1,156	258	320	831

TABLE 28.

Grants Under the Ability and Effort Plan Compared With the Grants Under the Woodruff and Edmonds Acts in Typical Third Class Districts of Clearfield County.

NAME OF DISTRICT	True valuation per teacher in thousands	True tax rate current expenses only (mills)	Current expense per teacher	Aid under Woodruff Act	Aid under Edmonds Act	Aid under Ability and Effort Plan
Clearfield Boro	$135	7.43	$1,375	$235	344	$372
Cooper Township	60	4.78	889	206	269	602
Dubois City	128	7.53	1,395	285	348	431
Morris Township	69	4.68	866	221	281	543
Sandy Township	101	4.63	861	204	320	393

Third Class Districts of Delaware County.

NAME OF DISTRICT	True valuation per teacher in thousands	True tax rate current expenses only (mills)	Current expense per teacher	Aid under Woodruff Act	Aid under Edmonds Act	Aid under Ability and Effort Plan
Darby Boro	$214	7.10	$1,315	$122	$350	$ 50
Haverford Township	665	7.84	1,451	219	348	24
Marcus Hook Boro	186	7.38	1,366	180	334	59
Radnor Township	385	10.88	2,013	206	343	65
Ridley Township	272	8.57	1,587	227	305	60
Upper Darby Township	119	8.97	1,660	190	350	593

Third Class Districts of Lancaster County.

NAME OF DISTRICT	True valuation per teacher in thousands	True tax rate current expenses only (mills)	Current expense per teacher	Aid under Woodruff Act	Aid under Edmonds Act	Aid under Ability and Effort Plan
Columbia Boro	$143	7.44	$1,377	$252	$348	$313

Third Class Districts of Washington County.

NAME OF DISTRICT	True valuation per teacher in thousands	True tax rate current expenses only (mills)	Current expense per teacher	Aid under Woodruff Act	Aid under Edmonds Act	Aid under Ability and Effort Plan
Canonsburg Boro	$114	5.05	$ 935	$165	$309	$359
Cecil Township	136	7.51	1,390	219	292	369
Charleroi Boro	105	7.40	1,369	235	343	592
Chartiers Township	193	4.99	924	183	272	40
Donora Boro	122	6.58	1,218	214	337	415
E. Pike Run Township	105	6.04	1,118	221	336	484
Monongahela City	124	7.10	1,314	240	365	434
Smith Township	117	7.60	1,407	148	277	518
Washington Boro	123	8.04	1,488	235	335	499

TABLE 29.

Grants Under the Ability and Effort Plan Compared With the Grants Under the Woodruff and Edmonds Acts in First and Second Class Districts.

NAME OF DISTRICT	True valuation per teacher	True tax rate current expenses only (mills)	Current expense per teacher	Aid under Woodruff Act	Aid under Edmonds Act	Aid under Ability and Effort Plan
First Class						
Philadelphia	$439,361	15.29	$2,829	$262	$300	$ 76
Pittsburgh	302,125	15.51	2,870	221	300	93
Second Class						
Allentown	241,509	11.57	2,142	283	350	71
Altoona	193,615	8.70	1,610	270	350	70
Bethlehem	325,630	7.34	1,358	281	350	44
Chester	415,076	10.18	1,885	344	350	51
Easton	235,241	13.37	2,800	274	350	78
Erie	215,502	13.87	2,567	222	350	97
Harrisburg	252,748	12.59	2,330	237	350	88
Hazleton	126,096	7.35	1,360	297	350	434
Johnstown	163,797	10.82	2,002	232	350	239
Lancaster	308,123	10.85	2,008	281	350	71
McKeesport	316,499	11.68	2,162	239	350	70
New Castle	186,955	6.97	1,290	223	350	54
Norristown Boro	176,594	10.37	1,920	252	350	75
Reading	196,137	11.05	2,045	279	350	88
Scranton	177,406	11.78	2,180	299	350	95
Wilkes-Barre	287,326	11.30	2,091	276	350	79
Williamsport	154,255	12.18	2,253	252	350	378
York	185,156	10.81	2,001	249	350	86

It is impossible to prepare a table which will show clearly the exact relation between these three factors. Table 30 is presented, however, to show the relationship between the size of the grants and the valuations in the fourth class districts contained in Table 27. This may be compared with Table 14 and the differences observed. In the latter table it will be seen that the smaller grants come as a rule to the wealthier districts and the larger grants to the poorer districts, in direct opposition to the results of the distribution of funds to those districts according to the terms of the Edmonds Act.

TABLE 30.

Relationship Between the True Valuation per Teacher and State Aid to be Received under the Ability and Effort Plan in Typical Fourth Class Districts of Selected Counties.

True valuation per teacher in thousands	STATE AID UNDER ABILITY AND EFFORT PLAN																													Total
	$ 0– 49	50– 99	100–149	150–199	200–249	250–299	300–349	350–399	400–449	450–499	500–549	550–599	600–649	650–699	700–749	750–799	800–849	850–899	900–949	950–999	1000–1049	1050–1099	1100–1149	1150–1199	1200–1249	1250–1299	1300–1349	1350–1399	1400 & over		
$ 0– 9									1																						1
10– 19															1											1	1				3
20– 29															1						1										2
30– 39																			1	2	1			1					2		7
40– 49													1		1	1		1		1	1										6
50– 59													1		1	2	1	2		1					1						9
60– 69										1				1	1		1														4
70– 79											1	2		1			1	3													8
80– 89										1			1	1																	3
90– 99																	1	1				1									3
100– 109				1				1																							2
110– 119									2	1		1		1																	5
120– 129				1		1			2																						4
130– 139						1				1												1									3
140– 149					1	3				2	1																				7
150– 159				2	2	1																									5
160– 169				1																											1
180– 189	1																														1
190– 199		1	1																												2
200– 209	1																														1
210– 219		2																													2
220– 229	1	2																													3
230– 239	1																														1
260– 269		1																													1
270– 279	1	1																													2
280– 289		1																													1
290– 299		1																													1
330– 339	1																														1
340– 349		2																													2
380– 389		1																													1
400– 409	1																														1
420– 429	1	1																													2
430– 439		1																													1
460– 469	1																														1
470– 479																															
560– 569	1																														1
670– 679																															
Total	10	14	1	5	3	6		1	5	6	2	3	3	4	5	3	4	7	1	4	3	2		1	1	1	1		2		98

Median True Valuation in Thousands, $114,000.
Median State Aid, $483.

Special Aid Under the Proposed New Plan.

Various forms of Special Aid should be established in addition to General Aid as outlined above in order to encourage districts to undertake worthy projects which ordinarily they would not enter upon without some inducement from outside their own resources. *The state of Pennsylvania already has two excellent forms of Special Aid; viz., granting one-half the cost of transportation to approved consolidated schools and the payment of $200 to school districts for each building abandoned since the year 1911.* Both of these should be retained. There is also provision in the law for aid to special classes, but as yet no adequate appropriation has been made for this purpose. This provision should be retained and proper appropriation made. In addition to this it is very much desired that the following forms of Special Aid be added:

1. HIGH SCHOOLS. In order to encourage the establishment of new high schools and the expansion of present high schools in poor districts, it is recommended that the state grant $100 annually for each new or additional teacher employed. This amount, together with the increased appropriation that comes to such districts by reason of the increase in the number of teachers, should provide a sufficient inducement for the provision of the right number of teachers and should also encourage the high school to take in pupils from outside of the districts in which they are situated. This form of aid should be limited to 20 years.
2. ERECTION OF SCHOOL HOUSES in consolidated districts and of teacherages in poor districts outside of boroughs. This aid should be based upon the valuation per teacher and in the following amounts:

Less than $ 50,000	25	per cent of cost of building and equipment
50,000— 99,000	20	" " " " " " " "
100,000— 149,000	15	" " " " " " " "
150,000— 199,000	10	" " " " " " " "
200,000— 249,000	5	" " " " " " " "
250,000—and over	0	" " " " " " " "

This aid should be subject in each case to the approval of the State Department of Education, both from the point of view of the location of the site and the plans of the building, and also from the point of view of whether the erection of such a building in such a place is best adapted to promoting the best educational advantages for the children of the entire community. It is not intended that this state aid shall be given to assist in the erection

of buildings that satisfy needs of small groups of children, unless this is unavoidable.

3. TRANSPORTATION.—Aid for purchase of trucks and wagons for transportation purposes in consolidated districts. Efficient and adequate provision for transportation of school children is just as important as proper housing in rural districts. Experience has shown that inhabitants of such districts are not inclined to make the proper provision in this particular. State aid is, therefore, necessary to promote the best interest of the state as a whole. It is recommended that aid be granted in such proportions as is provided for school houses, teacherages, etc., given in the paragraph above.

4. TRANSPORTATION AID.—The intention back of the present law regarding aid for transportation, one-half of that expended by the local districts up to an amount of $3,000 is worthy of praise. This form of aid would be much improved, however, if the amount granted would be adjusted to the true valuations of the districts to which aid is given. It is recommended, therefore, that the percent of the expenses to be paid by the state be made dependent upon the deficiency in equalized valuations below the standard equalized valuation per teacher in accordance with the following schedule:

Equalized Valuation Per Teacher	Percent of Expense to be Paid by State
$ 0,000– 9,000	95
10,000– 19,000	90
20,000– 29,000	85
30,000– 39,000	80
40,000– 49,000	75
50,000– 59,000	70
60,000– 69,000	65
70,000– 79,000	60
80,000– 89,000	55
90,000– 99,000	50
100,000–109,000	45
110,000–119,000	40
120,000–129,000	35
130,000–139,000	30
140,000–149,000	25
150,000–159,000	20
160,000–169,000	15
170,000–179,000	10
180,000–189,000	5

4. Teachers in Outlying Rural Schools.—It seems impossible to get teachers of superior qualifications to teach in the rural communities for the same salaries as are paid in boroughs. It is recommended, therefore, that the state assist the rural districts in securing teachers of high qualifications by adding a direct grant to the salaries of normal school graduates or to those with equivalent education who teach in outlying one-room rural schools. This amount may well be fixed at $10 per month for the first year, $15 per month for the second year and $17 and $20 per month for the third and fourth years. The poor quality of the instruction given in the one-room rural schools of Pennsylvania and of other states is one of the most serious shortcomings in our public school system. Some such liberal provision as this is necessary in order to remedy the situation.
5. Abandonment of School Buildings in Rural Districts.—The present grant of $200 per year for school buildings practically abandoned should be reduced to $100 and continued until such time as the desirability of consolidation of schools is more generally appreciated than at present.
6. Supervision.—In order to encourage weaker districts to employ supervising principals, it is recommended that the state grant to such districts $800 per year toward the salary of those supervisors giving their full time to supervision; this grant to be limited to a period of twenty years.

Modifications to Meet Probable Objection of the Wealthier Districts.

It is obvious that the plan for General Aid as outlined above favors the less wealthy districts of the state and that if adopted, the wealthier districts would not receive as much as under the present plan. It is believed that from the standpoint of the state as a whole, more liberal aid to these latter districts than that which is granted above is not necessary. Inasmuch, however, as such districts are often able to influence the Legislature to an unusual degree, conditions may develop which will make it advisable that their demands be met.

The wealthier districts, particularly the cities having manufacturing centers, are inclined to claim that they pay the larger proportion of the taxes that support the state government and that

they are, therefore, entitled to a considerable share of the proceeds of the taxes. This point of view is local and provincial. It does not recognize the true relation of the citizen to the state nor is it one that should be encouraged by the State Legislature. The interests of the country and the city are so interdependent that the money of all should be expended in such a way as to promote the good of all rather than of either group.

The way suggested to meet such a contingency as this is to preserve the plan of General Aid as proposed above but to combine with it a plan involving a state tax which is virtually a local tax and the redistribution of such revenue back to the districts in much the same proportion as it was paid into the State Treasury. Such money should best come from a new form of taxation, as a state tax upon general property or a tax upon manufacturing corporations. Any other form of taxation which would be paid in by the local districts in much the same proportion as it is proposed to pay it out would be equally good from our standpoint for schools. Approximately $5,000,000 would be required for this purpose in order to grant the wealthier districts the amount they now receive.

There is, in fact, more to be said in favor of such a measure than appears upon the surface. The costs of schools in the cities have increased to a marked degree in recent years, due not only to the demands of teachers for increased salaries, but also to the activities of various associations interested in the welfare of the schools. The local taxpayers as a group and those charged with the responsibilities of local government have not always been in agreement with the first named groups. It has been easier, therefore, to secure increases of salaries through state legislation and the grants of state money than through local legislation and local tax rates. Such a situation and such an outcome has taken place in New York state, but it happened that in that state at the same time teachers in cities secured large increases in salaries through increased grants, the state imposed a mill and a half tax, which taking the cities as a group, fully repaid the state for the amount that it had to pay out to these cities.

When the Edmonds Act was passed two years ago there were no such increased revenues, inasmuch as the increased salaries for teachers were necessary. As these increases were not excessive,

it would appear to be a wise policy on the part of the state now to levy such a tax as would make it possible for the people of the cities to secure by an indirect method the increased amounts of money required. The salaries of the teachers ought not to be low and choice must, therefore, be made between a large increase in the local tax in cities and such a state tax as would come very largely from those cities, the major portion of which would go back to them through the method of distribution here suggested. Certainly it is true that the less wealthy fourth and third class districts and certain second class districts should have the first call upon the state appropriations and that the wealthier first and second class cities and the twenty-five percent of the wealthier third and fourth class districts should not be entitled to funds until after the needier group has been supplied.

Has the State Aid Plan Herein Proposed Satisfied the Principles That Should Govern State Aid?

Having set up these principles whereby state aid for schools should be judged, it is now desirable that the plan herein proposed be tested out in accordance with them. Inasmuch as it responds immediately and proportionately to any change in the *ability* of the school district to support the type of school it is maintaining, it satisfies the *first principle.* Should there be any change, either in the number of teachers affecting the size of the school or in the value of the taxable property, the effect will be manifest at once in the determination of the corresponding tax rate.

The *second principle* requires that state aid be adjusted to the amount of effort required by local districts to support schools as revealed in the costs and tax rates. In the plan here proposed the very close relationship between these two factors is maintained throughout and any change in the costs and its corresponding tax rate affects immediately and proportionately the amount of state aid.

The *third principle,* which requires that districts be rewarded for undertaking some new feature, is satisfied by the grants of the various forms of Special Aid.

The *fourth principle,* which requires that it promote the best education for every child in the state, is satisfied in that aid of some

amount in proportion to the Ability and Effort Plan extends to every district.

The *fifth principle* requires that the local districts be left to determine their own policies so long as they comply with the minimum and maximum standards fixed by state law. At the same time, it lays considerable stress on giving the largest possible freedom to local districts and upon the importance of school districts making advances by their own action, even though they are encouraged to do so by some financial benefit which may come from the state, rather than to have the district compelled to change its plans and methods of administration by the force of state law or the requirements of the State Education Department.

While this principle cannot operate in its greatest efficiency so long as increments in salaries above the minimum salary and the standards for rating teachers to secure these increments are fixed by state law, nevertheless it is believed that a minimum state salary schedule, such as is embodied in the Edmonds Act, is necessary in Pennsylvania at the present time. It will prove helpful in the realization of the very worthy plan of the State Superintendent of Public Instruction to speedily advance the qualifications of teachers throughout the entire state. On the other hand it is believed that it has been the cause of maladjustments and difficulties which have arisen and that wastes which have resulted could have been minimized and largely removed had the administration of schools in the various cities been properly supported by the people. These maladjustments and wastes are of less importance than the providing of those conditions which will make for one of the most able and efficient state group of teachers in the entire country. The authority to adjust salaries above the minimum should be given back to the local school districts after this end has been accomplished.

The importance of this is borne out by the following consideration:

As the costs of schools increase, their management must show a corresponding increase in efficiency, and eventually the people in the local districts must be satisfied that the money they are spending has its full return. Thus, the elimination of wastes and the building up of the highest efficiencies in schools can be best accomplished under the local school administration. The state should

insist on minimum standards, and through its system of state aid and through the giving of advice and assistance in local campaigns, promote efficiency above that level.

The *sixth principle*, that all of the school districts should be stimulated to make their best efforts, is satisfied in that General Aid is made applicable to all and in proportion to effort expended.

Cost of the Plan of General and Special Aid.

Before outlining the estimates of cost under the Ability and Effort Plan a statement will first be made of the cost of the grants under the Edmonds Act. In both cases only the grants on the teacher basis will be considered, thus excluding all grants of Special Aid, such as for transportation and the abandonment of school buildings.

The Edmonds Act required payments by the state to local school districts at the rate of $16,900,000 per year, of which approximately 16 percent went to first class districts, 12 percent to second class districts, 24 percent to third class districts and 48 percent to fourth class districts. It is estimated by the Department of Public Instruction that $18,180,000 will be required for the same purposes during the next fiscal year beginning June 1, 1923, and $18,685,000 for the following fiscal year.

Careful estimates have been made of the cost of the plan of General Aid as proposed in Table 23 (pages 60 and 61). The results of such computations are given in Table 31 (page 88). It will be noticed that the amounts given in the tables differ in accordance with the average tax rates that will be levied in the various types of districts and also with the Standards of True Valuation per teacher which may be adopted. It is believed that the $185,000 as the Standard True Valuation is the one that should be adopted for the best interests of education in Pennsylvania. This would require an annual expenditure of about $17,700,000, slightly less than would be required by the operation of the Edmonds Act during the coming year according to the estimate of the State Department of Public Instruction.

TABLE 31.

ESTIMATE OF EXPENSES OF ALL CLASSES OF DISTRICTS IN LOWER RANGE PLUS UPPER RANGE.

True Valuation Per Teacher in Thousands	MILLS				
	6	7	8	9	10
$125	$10,346,810	$11,520,668	$12,709,132	$13,895,898	$15,081,465
135	10,369,485	11,847,410	13,310,143	14,780,976	16,252,809
145	10,969,111	12,611,207	14,358,309	16,003,415	17,649,520
155	11,957,125	13,794,108	15,667,891½	17,433,294	19,266,285
165	12,829,780	14,807,184	16,786,620½	18,767,032⅝	20,751,419
175	13,539,953	15,660,353	17,785,753	19,909,153½	22,033,553
185	14,346,620	16,738,550	19,154,456½	21,692,042	24,255,257

Total expenses were used as a basis in the computations in this study for two reasons, first, because such a basis is of greatest benefit to those districts in which there have been long years of apathy toward the schools; second, because it is easy to make fairly accurate estimates for a narrower basis upon that furnished by total expenses if such a step were thought advisable.

It is much more difficult to estimate the amount that would be required by the different forms of Special Aid suggested here, possibly $2,000,000 would be required altogether, including the appropriations for vocational schools. This would make necessary the total appropriation of practically $20,000,000 per year in order to promote the best interests of education in the state.

If the grants to the school districts under the Ability and Effort Plan were made upon the basis of salaries alone, rather than upon the total basis of expenses, the total cost to the state would amount to approximately $13,000,000. Special Aid might be reduced to an appropriation of $1,000,000, making a total of $14,000,000. This is the lowest amount that should be considered. If deemed necessary to make the total grant to public schools less than this amount, however, lower standard valuations per teacher could be established. This would reduce the $13,000,000 for General Aid in about the same proportions as the figures given in Table 31, with total current expenses as their basis.

It is much to be desired that the districts having valuations below $90,000 per teacher be granted aid upon the basis of total expenses rather than upon teachers' salaries alone. To afford this aid it would require approximately $2,000,000 in addition to the amount based upon teachers' salaries alone. There are about

11,000 teachers in this state, more than one in five, who teach in a school district, which in order to pay a teacher $100 per month for nine months, would have to levy a true mill tax of ten mills or more—even up to thirty mills—and an additional tax of two and one-half mills in order to properly operate and maintain the school, furnish adequate supplies, proper janitorial care, etc. As rates of assessment run in this state at the present time this would mean an annual tax of from twenty to twenty-five mills or more—as high up as sixty to seventy-five mills. The state grant averaging in these poorer districts from $325 to $350 per teacher would reduce this tax to between fifteen and twenty mills or more—as high as forty-five to sixty mills. Naturally under these conditions poor schools have been maintained and the interest in education has become very low indeed.

The state needs an up-building among its rural schools similar to that which has transpired in the past two years in its city schools. *It cannot be satisfactorily accomplished unless state aid is granted upon the basis of expense rather than that involved in teachers' salaries, which aid must, of course, be carefully safeguarded by proper maximum standards. This would require about $16,000,000 per year.*

Other Aspects of State Financial Policy in the Field of Education.

There are certain other features of finances of public education in the state that should be mentioned briefly in such a study as this.

Reorganization of Local School Districts.—Generally speaking the boundaries of the school districts of the state coincide with those of the cities, boroughs and townships. Such a division of territory in rural sections is not well adapted to the convenient location of school houses, particularly of high schools and to the local support of schools. In consequence many pupils in the state now have to walk long distances, and sometimes through other school districts, in order to reach their particular school. There are also many pupils who have completed the grammar course and are ready to enter high school but cannot find a high school open to them. The districts in which they live are not able

financially to erect a high school building and to bear the expense of running schools therein. Even if they were financially able their boundaries are such that the number of pupils is insufficient or even if these conditions were met there would be great waste upon the part of many districts in maintaining small high schools.

The force of all this statement is that the territory of the state should be redistricted, and units be formed which will contribute to the highest efficiency of the schools on the one hand and to the most economic operation of such schools on the other hand. Such a reorganization should have as its basis the establishment of units of territory, each contributory to a central high school so that each child of high school age would have a high school reasonably close at hand to which he is entitled to go. The completion of the high school by every pupil is as much the standard of today as the completion of the grammar school was 20 or 30 years ago. These changes make necessary a complete reorganization of the school districts of the state. The sooner this is done, the better from the standpoint of elimination of waste in public school expenditures.

High School Tuition.—In order to promote in the best way the attainment of high school education by all the pupils of the state until such reorganization is brought about, the method provided in the state school code for estimating the amount of high school tuition should be changed. The expenses of operation, maintenance and depreciation of the physical plant should be taken into account in fixing the rate of tuition as well as the cost of instruction as now provided. Presumably the present plan which benefits the rural districts was adopted because usually these districts are less able to pay for such tuition than are the districts in which the high schools are situated, but in the plan for General Aid recommended above all of these differences are removed so that this plan of computation will be equitable to all and will at the same time encourage the boroughs to open their doors to rural school pupils in the way in which they now, in justice to themselves, rightfully refuse to do. It is also recommended that a law be passed authorizing any local school district to make a contract with any other school district for the instruction of pupils in the high schools, such contract to be subject to the approval of the State Superintendent of Public Instruction.

STATE SCHOOL FUND.—A State School Fund provided for in the Code of 1911, which has been gradually increasing as the proceeds of the income from forest lands has come in, should be still further developed so that in the years to come we may have a permanent school fund comparable to those of other states. The sources for the increase of such funds should be enlarged to the greatest possible extent. Need for this is seen in Table 32, which shows the large school funds of other states.

TABLE 32.

PERMANENT STATE SCHOOL FUNDS, 1919-20.[1]

States	
Alabama	2,374,500
Arizona	1,025,527
Arkansas	1,200,000
California	7,691,987
Colorado	6,507,574
Connecticut	2,019,170
Delaware	488,235
Florida	1,565,667
Georgia	.....
Idaho	9,107,182
Illinois	948,955
Indiana	10,226,927
Iowa	4,818,094
Kansas	9,958,535
Kentucky	2,013,536
Louisiana	2,447,745
Maine	485,744
Maryland	247,935
Massachusetts	5,000,000
Michigan	5,335,732
Minnesota	30,920,032
Mississippi	1,035,641
Missouri	3,159,281
Montana	17,518,966
Nebraska	9,425,094
Nevada	2,770,674
New Hampshire	59,723
New Jersey	8,236,288
New Mexico	567,689
New York	9,371,863
North Carolina	907,406
North Dakota	13,560,081
Ohio	16,405,883
Oklahoma	12,660,811
Oregon	8,629,260
Pennsylvania	495,747
Rhode Island	255,193
South Carolina	60,000
South Dakota	24,312,084
Tennessee	2,512,500
Texas	73,892,960
Utah	4,192,997
Vermont	1,365,642
Virginia	.....
Washington	15,332,440
West Virginia	1,000,000
Wisconsin	5,012,394
Wyoming	3,743,853

[1]Data furnished by U. S. Bureau of Education Report.

The delays in the payment of the state grants to local districts during the past two years have caused considerable harm and inconvenience. The fundamental reason is the lack of ready money in the State Treasury. The State Department of Public Instruction has not been responsible in any way. The remedy is the passage of an act directing the State Auditor and the Treasurer to pay grants to local districts on or before dates specified in the law, to authorize them to draw upon the separate funds and to reimburse such funds upon the receipt of the first taxes together with proper interest. There are millions of dollars of such funds available. It is not only unfair to the local districts to make them borrow money in lieu of overdue state funds, but it is a discredit to the state itself not to be able to pay its obligations.

COMMISSION.—There are undoubtedly wastes in the conduct of public schools at the present time. This exists throughout all parts of the country. The schools of Pennsylvania are probably being conducted more economically than those of most states, nevertheless it is desirable that definite steps be taken to study ways and means of eliminating such wastes. It is recommended that a commission be formed consisting of experts in the various fields of public school management and of citizens who will make the proper inquiry into this subject and report to the Governor and to the Legislature at a session two years hence.

Supplementary Report.

To the Citizens' Committee on Finances
of the
State of Pennsylvania

The following undersigned members of the Advisory Committee on Education beg leave to submit the following supplementary report:

I. We agree on the whole with the report on the public schools as submitted by the experts. We recognize needed changes in the method of distributing state school funds and urge the careful and further study of the "Ability and Effort Plan."

II. We do not find ourselves, however, in complete agreement with that part of the report which advocates the new method of distribution called in the report "The Ability and Effort Plan" for the following reasons:

1. Until there is an agency such as a State Tax Commission to equalize and to determine rates of assessment, any such plan as proposed must be based upon the reports of assessment as made by the school board secretaries of 2,600 districts. As is well known these reported rates were in most cases mere opinion.

2. While in the opinion of the experts the "Ability and Effort Plan" alone would cost no more than the Edmonds plan yet, if it should be necessary to retain the plan of the Edmonds Act to meet the needs of the first and second class districts, about $5,000,000 now would be required.

III. Therefore, we strongly recommend that the essential features of the Edmonds Act be retained for the following reasons:

1. It would be unwise and inopportune to introduce a new plan of distribution before giving the present Edmonds Act a longer trial.

2. The Edmonds Act has made a beginning in equalizing educational opportunities, especially in fourth class districts.

3. Each feature of the Edmonds Act is an essential part of a state-wide forward-looking educational program. To disturb

or change radically any part of the Act would endanger the whole program that has so generally been accepted throughout the state.

4. The Edmonds Act is simple in its provisions, easily understood and administered.

5. The provisions of the Edmonds Act are retaining many efficient teachers in the service of the state, improving thousands of others, and attracting many young men and women of superior ability to the profession.

IV. While commending the general features of the Edmonds Act, we feel that the following improvements should be made:

1. Definite salary schedule with increments for fourth class districts (as in the report).

2. Same number of increments for each class of school districts in order to retain efficient teachers in each type of district (as in the report).

3. The state should contribute its share of the increments required in each district (as in the report).

4. Provisions should be made for the creation of a fund for Special Aid to needy school districts.

(Signed)

Charles E. Dickey
Edward S. Ling
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Charles S. Davis
Robert E. Laramy
Florence Deibert
R. L. Munce
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CHAPTER III.

Normal Schools.

Foundation.—There are fourteen State Normal Schools in Pennsylvania, one of which, the Cheyney School, is designated for the training of negro teachers. This school was but recently acquired by the state, and as the data for it, as well as for similar institutions throughout the country are most limited, this study will be confined to the original thirteen State Normal Schools only.

The first of these schools was organized at Millersville in 1855, but was not recognized as a State Normal School until 1857. The Normal School Act of 1857 resulted in the establishing of other schools in different parts of the state, the thirteenth and last one being organized in 1893. Many of these schools were formerly private academies devoted to secondary academic training and in some instances were founded through local philanthropic efforts as private corporations under the law of 1857. Because of this they were established here and there in small rural communities without any preconceived plan of organizing a system of schools for the training of teachers to supply the need of the public schools of the state.

The Normal Schools are now owned and controlled by the state, having been acquired during the past ten years, through purchase under the law of 1911, with the state assuming all mortgages and general indebtedness of each school respectively.

Tuition and Maintenance.—For a period of time prior to 1919, the tuition of Normal School students over seventeen years of age preparing to teach was paid by the state at the rate of $60 per year. From that time until 1921 the rate was increased to $80 per year, or $2 per week. In addition to this the state also paid each Normal School $10,000 annually for maintenance. This most inadequate system of state support was changed in 1921 when the old tuition and maintenance policies were replaced by one appropriating a very much larger amount (1) "For instructional, operating and maintenance expenses," and (2) "for necessary additions, extensions, alterations, equipment and repairs," to be distributed by the State Superintendent of Public Instruction.

In 1921 there was also an appropriation made to the trustees of the several State Normal Schools to cover the deficiencies of the two previous years and an appropriation for the payment and liquidation of the mortgage indebtedness. An unused balance of an appropriation "heretofore made by the general appropriation act in 1919" was "re-appropriated to the Department of Public Instruction to be paid to the said State Normal Schools for maintenance." While these appropriations will be analyzed later on in this study, it will be seen at once that the state support for the state-owned and controlled Normal Schools was not only much enlarged in 1921, but it was also placed on an entirely different basis.

It would be interesting to trace, first, the historical development of these schools from the early privately owned and controlled institution to the present state-owned and controlled system; second, the changes in management from a board of eighteen trustees entirely elected by stockholders to one composed of half of the trustees elected by the stockholders and half appointed by the State Superintendent of Public Instruction, and finally to the present plan of nine trustees appointed by the State Superintendent of Public Instruction; third, the development from the former highly diversified system in which each school was largely permitted to work out its own plans and ideals in all educational and financial aspects, to the present uniformly centralized system of state control and state support; and fourth, the gradual evolution in the aim of each school from *academic-secondary school standards* to the present progressive *professional standards* as evidenced by the successive changes in the course of study from a two-year secondary course beyond the elementary grades, to a three-year, then to a four-year course, and finally to the present course of two years of professional training in addition to a preparatory four-year High School course.[1] Any one of these phases of development might easily become the subject of a special investigation. In this study, however, they will be referred to only in the large as a possible explanation of some of the conditions which may be pointed out in the financial studies of the Normal School system as it is now constituted.

[1]Baker, Frank E., Discussion, Pennsylvania State Normal Schools—Schoolmen's Week Proceedings, 1916, pp. 85-95.

The Scope of the Investigation.

An effort will be made to study the data of the thirteen Normal Schools in order to evaluate the findings in terms of standards obtained from a similar investigation for 1921-22 of: (1)[1] a group of eight Normal Schools selected as among the best developed schools for the training of teachers, (2)[2] thirty unselected Normal Schools with two-year courses from all parts of the country, (3)[3] eight unselected Normal Schools with more than two-year courses, and (4) the Normal School systems of the states of Massachusetts, Minnesota and Wisconsin.

This study will be concerned mainly with the analysis of Normal Schools under the following headings:

1. Normal School Conditions.
   a. The student enrollment, Normal and Training School faculties and Training School enrollment and facilities.
   b. The total expenses, total instruction (including instruction in Normal School and in Training School), general control, auxiliary agencies, maintenance, operation and capital outlay.
   c. Normal School and Training School salaries.
   d. Housing expenses.
2. The Purpose of and Need for Normal Schools in the state and the facilities for meeting such needs.
3. Receipts and State Appropriations.
4. Conclusions and Recommendations, especially with view to a state budget, that may be safely drawn from the facts obtained.

---

[1]The eight selected Normal Schools:

State Normal School, San Diego, Cal.
State Normal School, Oneonta, N. Y.
State Normal School, Milwaukee, Wis.
State Normal School, Salem, Mass.
Montclair Normal School, Montclair, N. J.
Buffalo Normal School, Buffalo, N. Y.
St. Cloud Teachers College, St. Cloud, Minn.
Illinois State Normal, Normal, Ill.

[2]The thirty unselected Normal Schools with two-year courses are located in the following seventeen states:

Arizona
California
Connecticut
Georgia
Kentucky
Massachusetts
Minnesota
Montana
New Hampshire
New Jersey
New York
North Carolina
North Dakota
Oklahoma
South Dakota
Texas
West Virginia

[3]The eight unselected Normal Schools with more than two-year courses are:

State Normal School, Salem, Mass.
State Normal School, Fredonia, Mass.
State Normal School, Cheney, Wis.
State Normal School, River Falls, Wis.
State Normal School, Stevens Point, Wis.
State Normal School, Whitewater, Wis.
Washington State Normal School, Ellensburg, Wash.
State Teachers College, Fresno, Cal.

Student Enrollment, Training School and Faculty.

Normal School Enrollment.—In Column 2, of Table 33 (page 99), it will be observed that the regular Normal School enrollment for the year 1921-22 ranges from 814 in School No. 6, ranking 1 in size, to 151 in School No. 8, ranking 13 in size, with an average enrollment of 424. These enrollment figures comprise the number of regular Normal course students listed in Column 3, plus the number of students in Special Courses and secondary departments found in Columns 4 and 5, respectively. In order to compute the per capita expenses of these schools there has been added to the regular Normal School enrollment one-fourth of the number of students enrolled in the summer and spring sessions, as these are of nine weeks duration, comprising one-fourth of the regular school year. These figures are included in Column 1, designated "adjusted total enrollment."

TABLE 33.

Student Enrollment, Faculty and Graduates in the Thirteen Pennsylvania State Normal Schools, 1921-22.

(Figures in parentheses indicate rank.)

No.	NORMAL SCHOOLS	Adjusted total enrollment including Spring and Summer Session	Regular enrollment excluding Spring and Summer Sessions	Regular Normal Course Students	Students in Special Courses	Students in Secondary Depts.	Graduates 1922	Summer Session 1921	Spring Session 1922	Extension 1921-22	Correspondence 1921-22	Normal and Training School Faculty	Normal School Faculty	Training School Faculty	Students per Teacher Normal School Faculty	Pupils in Training School	Pupils in Training School per Graduate	Pupils in Training School per Teacher Training School Faculty
1	Bloomsburg	640 (4)	515 (3)	394	84	37	128 (6)	498	.....	875	.....	48	30	18	13.3 (10)	610 (4)	4.7 (6)	33.8
2	California	534 (6)	366 (8)	186	129	51	87 (11)	501	171	299	.....	28	.....	.....	18.4 (3)	435 (8)	5.0 (5)	.....
3	Clarion	335 (12)	223 (12)	113	.....	110	38 (13)	350	91	141	3	25	.....	.....	13.4 (9)	217 (11)	5.7 (2)	.....
4	East Stroudsburg	398 (10)	311 (10)	267	21x	23	112 (9)	347	.....	402	160	32	21	11	12.4 (11)	630 (3)	5.6 (3.5)	57.2
5	Edinboro	369 (11)	286 (11)	261	25x	.....	94 (10)	333	.....	638	.....	34	29	5	10.9 (13)	526 (5)	5.6 (3.5)	10.5
6	Indiana	930 (1)	814 (1)	456	147x	211	230 (2)	463	.....	1075	128	69	52	17	13.5 (8)	650 (2)	2.8 (10)	38.2
7	Kutztown	461 (9)	373 (7)	318	.....	55	141 (5)	350	.....	.....	.....	28	19	9	16.5 (4)	413 (9)	2.9 (9)	45.8
8	Lock Haven	224 (13)	151 (13)	124	22	5	49 (12)	265	29	62	.....	19	12	7	11.8 (12)	192 (13)	3.9 (7)	27.4
9	Mansfield	530 (7)	469 (5)	354	75x	40	181 (4)	242	.....	.....	60	34	23	11	15.6 (6)	500 (6)	2.7 (11)	45.4
10	Millersville	526 (8)	358 (9)	297	.....	61	205 (3)	382	289	103	.....	32	23	9	16.4 (5)	352 (10)	1.7 (13)	.....
11	Shippensburg	683 (3)	474 (4)	314	5	155	124 (7)	455	378	75	5	37	32	5	18.5 (2)	462 (7)	3.7 (8)	92.4
12	Slippery Rock	539 (5)	408 (6)	234	17x	157	114 (8)	452	71	193	5	36	29	7	15.0 (7)	212 (12)	1.9 (12)	30.2
13	West Chester	843 (2)	770 (2)	728	8x	34	294 (1)	293	.....	105	.....	42	.....	xx4	20.1 (1)	1858 (1)	6.3 (1)	.....
	Total	7012	5518	4046	533	939	1797	4931	1029	3970	361	464	.....	.....	.....	7057	.....	.....
	Pa. Average	539	424	311	53	78	138	379	172	361	602	36	.....	.....	15.1	543	4.0	.....
	NORMAL SCHOOL STANDARDS																	
	Eight Selected Schools	732	.....	.....	.....	.....	178	.....	.....	.....	.....	63	.....	.....	.....	747	4.3	.....
	Thirty Unselected Schools with two-year courses	436	.....	.....	.....	.....	83	.....	.....	.....	.....	28	.....	.....	15.3	384	4.6	.....
	Eight Unselected schools with more than two-year courses	720	.....	.....	.....	.....	137	.....	.....	.....	.....	41	.....	.....	17.6	308	2.3	.....
	Minnesota Schools	994	.....	.....	.....	.....	131	.....	.....	.....	.....	.....	.....	.....	.....	298	2.3	.....
	Wisconsin Schools	624	.....	.....	.....	.....	.....	.....	.....	.....	.....	42	.....	.....	14.9	.....	.....	.....
	Six Massachusetts Schools	244	.....	.....	.....	.....	79	.....	.....	.....	.....	.....	.....	.....	.....	553	10.4	.....

xSpecial three years' courses authorized by State Department of Public Instruction.
xxForty Public School Teachers in addition are used by this school as critic teachers.

The average corrected enrollment for all the Normal Schools is 539, with a range of 930 in School No. 6 to 224 in School No. 8. The seven Normal Schools comprising the middle 50 percent of this group range in attendance from 640 in School No. 1 to 398 in School No. 4.

In comparing this enrollment with the standards as found at the foot of Table 33 it may be seen that the Pennsylvania Normal Schools are considerably lower in average enrollment than in the selected schools with an average of 732, the unselected schools with more than two-year courses with an average of 720, the Minnesota Normal Schools with an average of 994, and the Wisconsin schools with an average of 624. However, in comparison with the average enrollment of 436 for the thirty unselected State Normal Schools with two-year courses and Massachusetts with its average of 244, Pennsylvania ranks higher. It will, therefore, be seen from these figures that when the total enrollment is considered, including the summer and spring sessions, that four of the Pennsylvania Normal Schools have enrollments of over 600 students and consequently rank fairly well in size with the other Normal Schools of the country. However, in the regular Normal School enrollment (Column 2), excluding the spring and summer sessions, only three of the thirteen schools have enrollments of over 500 students. At the same time it should be pointed out that in 1921-22 Schools Nos. 8,3, 5 and 4 had unusually small enrollments, a factor which must be kept in mind throughout this study in analyzing the finances of these schools. All of these enrollment figures have been materially increased in practically all departments for the present year, 1922-23, as will be pointed out later in this study.

Enrollment in Special Courses.—A further analysis of the enrollment in the Pennsylvania Normal Schools shows that probably the two most unusual facts are the number of students in Special Courses and the number of students in secondary departments, Columns 4 and 5. While most of the Normal Schools having a large number of students in Special Courses are authorized by the State Department of Public Instruction to give certificates for this special training, it is significant that some of the schools, notably Nos. 1, 2 and 8, report a comparatively large number of these special students, who will not receive special certificates and who are probably not preparing to teach.

Again several of the schools have included these special students, who are not receiving certificates in regularly organized Special Courses, among the group listed in Column 5 as secondary department students. While the number of students who are enrolled in secondary departments is decreasing from year to year in most of the schools, yet the total is entirely too large when the real purpose of the State Normal Schools is taken into account. Four of the schools, Nos. 6, 12, 11 and 3, have each more than 100 such students enrolled. This condition should receive special attention, especially since enlarged Training School facilities are needed, and since the need for preparing more teachers is so apparent. The facilities now used by the 939 students in the secondary departments and the 250 students in Special Courses not receiving authorized state certificates could be made available for regular Normal School students.

Enrollment in Summer and Spring Sessions.—The Normal Schools have given considerable service to the state through their summer sessions as evidenced by the 1921 enrollment ranging from 501 in School No. 2 to 242 in School No. 9, with an average per school of 379 and a total of 4,931 students. The 1922 summer session enrollment figures were much increased in practically all of the schools. (See Table 39.)

Five Normal Schools had spring sessions of nine weeks' duration in the second half of the second semester, organized especially for the training of teachers in service. School No. 11 showed an enrollment of 378 spring session students, School No. 10, 289 and School No. 2, 171. There were 1,029 such students enrolled in the spring of 1922 with an average for the five schools of 172. While only six of the schools maintained such sessions yet the total attendance would indicate that they were fulfilling a certain need which must be taken into account. At the same time we must not lose sight of the fact that this large body of students entering the schools during the spring term is bound to affect to a certain degree the regular Normal School administration. This fact may explain why there is a tendency on the part of the schools where they are organized to eliminate them by substituting the summer session or the Extension course.

Enrollment in Extension and Correspondence Courses.—In 1921 through the initiative of the State Department of Public

Instruction most of the schools organized Extension Courses in various centers throughout the state. During the years 1921-1922 there were 3,970 students enrolled in these courses, in eleven of the thirteen Normal Schools, with an average enrollment of 361 students. In the Correspondence courses established in the same year in six of the Normal Schools there was a total enrollment of 361 students.

Normal School Graduates.—The total number of Normal School graduates in 1922 was 1,797, an average of 138 per school. Column 6, Table 33, also shows a range in number of graduates from 294 in School No. 13 to 38 in School No. 3. In comparing the number of graduates in the Pennsylvania State Normal Schools with those indicated in the standards it is found that the average number of graduates in the selected schools, 178, is considerably greater than the average for Pennsylvania. In the unselected schools with more than two-year courses and in the Normal Schools in the state of Minnesota with averages of 137 and 131 respectively, the number of graduates is approximately the same as the average number for the state of Pennsylvania. At the same time the thirty unselected schools with an average of 83 graduates and Massachusetts with an average of 79 graduates are very much lower than the Pennsylvania Normal Schools.

Normal School and Training School Faculties.—The average Normal School faculty is 36 in number, ranging from 69 in School No. 6 to 19 in School No. 8. On the basis of the number of students enrolled in the Normal Schools, it will be seen in Column 14 that School No. 11, ranking 3 in total enrollment and 4 in size of faculty has a proportion of 18.5 students per teacher, thus placing it in rank 2. School No. 13 with the second largest enrollment and 5 in size of faculty has a proportion of 20.1 students per teacher and ranks 1 in the list. School No. 8 with the smallest number of students ranks 13 in relative size of faculty with a proportion of 11.8 students per teacher, thus ranking next to the lowest. Likewise School No. 5, ranking 11 in size and 6.5 in size of faculty, has the smallest proportion, viz., 10.9 students per teacher.

The middle 50 percent of the group, seven schools, range from 13.3 to 16.5 students per teacher, distributed about the general average of 15.1 for the entire group. This latter figure is practically the same as the average number of students per teacher

for the thirty unselected Normal Schools in the country at large, 15.3, and just slightly less than the average, 17.6 for the unselected schools of more than two-year courses. Since the cost of instruction is the largest single item in the total expenses of the Normal School, these variations in size of faculty per student enrolled will have considerable bearing in an explanation of the differences in expenses among the Normal Schools.

Training School Facilities.—The data in the last two columns of Table 33 will give an idea of the facilities afforded seniors in the training school of each of the Normal Schools. It is to be expected that the number of students in these schools will vary since the policy in each is dependent in a large measure upon local public school conditions and relationships. It is not our purpose to analyze the two or three essentially different teacher-training plans in vogue among these schools, but rather to shed some light in explanation of the tremendous variation in cost, which discussion will be taken up later.

The number of pupils available for training purposes ranges from 192 in School No. 8 to 1,858 in School No. 13, with an average of 543 for the thirteen schools. From a teacher-training standpoint the significance of these figures in training school enrollment can be more clearly pointed out in Column 16 on the basis of the number of graduates per Normal School. School No. 13 indicates 6.3 pupils per Normal School graduate, while School No. 10 indicates 1.7 pupils per graduate, with an average of 4.0 pupils for all the schools combined. Compared with the standards obtained from the selected Normal Schools with an average of 4.3 and the unselected two-year Normal Schools with an average of 4.6, the Pennsylvania Normal Schools have a lower average. Minnesota and Wisconsin Normal Schools have an average of 2.3 training school pupils per Normal School graduate, which is considerably less than the 4.0 pupil average for Pennsylvania schools. While the enrollment in practically all of the schools is below the standard considered essential for proper training purposes, our chief consideration of these items here is for comparative purposes in analyzing expenses.

Normal School Expenses.

Tables 34 to 38 are based on the financial reports submitted by the principals of the Normal Schools to the Department of Public Instruction.

Average Yearly Expense Per Student.—In these tables are tabulated completely in amounts and percentages the total expenses and expenses of instruction, general control, general auxiliary agencies, maintenance and operation as well as capital outlay for each Normal School as compared with the average of all the Normal Schools and with the various standards. These various items are analyzed in Table 35 on the basis of the number of students enrolled per year, and in Table 36 on the basis of an attendance week, which may be defined as the attendance of one student for one week during the school year 1921-22. It will be seen that the average yearly expense per student in all Normal Schools is $271 or $6.15 per week. There is, however, a wide variation in the cost of individual schools, three of them Nos. 8, 4 and 12 in the upper quartile show annual expenses of $480, $425 and $353 respectively, or a weekly expense of $10.67, $9.44 and $7.84, while Schools Nos. 10, 13 and 11 in the third quartile show just the opposite extreme, with expenses of $249, $195 and $169 respectively, per student, or a weekly expense of $5.53, $4.33 and $3.75.

TABLE 34.

Expenses, Capital Outlay and Balance on Hand, 1921-22.

NORMAL SCHOOLS	Rank in size	Total expenses	Total instruction	Instruction in Normal School	Instruction in Training School	General control	Auxiliary agencies	Maintenance	Operation of school plant	Capital outlay	Balance on hand, and amounts receivable
1 Bloomsburg	4	$176,677	$ 98,860	$ 58,998	$ 39,861	$16,390	$ 22,197	$ 18,085	$ 29,144	$ 14,702	$ 508
2 California	6	141,553	53,100	31,928	21,172	18,880	19,289	30,318	19,965	6,796	16,806
3 Clarion	12	88,296	43,657	38,573	5,083	13,288	8,188	7,760	15,401	21,944	5,362
4 East Stroudsburg	10	169,089	79,945	51,537	28,408	45,759	13,139	9,235	21,010	26,749	.....
5 Edinboro	11	122,935	61,574	49,598	11,976	15,941	17,520	2,868	25,030	45,394	679
6 Indiana	1	241,836	102,460	80,071	22,389	23,218	29,518	23,847	62,790	9,361	3,910
7 Kutztown	9	154,453	64,960	50,223	14,737	24,855	14,136	15,619	34,880	4,483	33,665
8 Lock Haven	13	107,623	47,859	29,124	18,734	13,690	7,729	14,079	24,265	.....	480
9 Mansfield	7	138,261	59,445	40,207	19,238	13,165	14,598	23,271	27,779	2,313	13,206
10 Millersville	8	130,954	59,164	43,150	16,014	17,024	10,731	7,652	36,381	5,005	9,266
11 Shippensburg	3	115,259	58,415	44,090	14,325	14,280	8,738	9,119	24,705	14,029	17,990
12 Slippery Rock	5	190,335	86,999	74,364	12,635	13,849	9,758	42,995	36,731	10,094	7,247x
13 West Chester	2	164,338	92,342	73,990	18,352	18,991	13,599	11,350	28,054	21,505	42x
Total		1,941,615	908,788	665,859	242,929	249,336	189,145	216,203	378,142	182,381	
Pa. Average		149,355	69,906	51,219	18,683	19,179	14,549	16,631	29,089	14,029	
xDeficit—Amounts payable	exceed	amounts re	ceivable.								
NORMAL SCHOOL STANDARDS											
Eight selected schools		170,360	121,447	82,585	28,563	13,401	6,284	8,770	23,350	11,946	
Thirty unselected schools with two-year courses		102,653	57,167	.....	.....	9,610	12,692	5,599	18,022	52,487	
Eight unselected schools with more than two-year courses		138,793	92,295	.....	.....	12,762	10,183	4,425	19,069	9,474	
Minnesota Schools		.....	77,086	.....	.....	19,118	2,740	.....	18,826	.....	
Wisconsin Schools		161,164	110,832	.....	.....	11,581	5,883	4,582	15,765	23,535	
Six Massachusetts Schools		90,411	54,224	37,669	16,555	8,609	1,390	7,007	19,412	14,948	

TABLE 35.

Expenses and Capital Outlay per Capita Student Enrolled per Year, 1921-22.

(Figures in Parentheses Indicate Rank.)

NORMAL SCHOOLS	Rank in size	Total expense	Total instruction	Instruction in normal school	Instruction in training school	General control	Auxiliary agencies	Maintenance	Operation of school plant	Capital outlay
1 Bloomsburg	4	$276. (6)	$154. (5)	$92.	$62.	$26.	$35.	$28.	$33.	$23.
2 California	6	265. (7)	99. (12)	60.	40.	35.	36.	57.	37.	13.
3 Clarion	12	264. (8)	131. (7)	115.	15.	40.	25.	23.	46.	66.
4 East Stroudsburg	10	425. (2)	201. (2)	129.	71.	115.	33.	23.	53.	67.
5 Edinboro	11	335. (4)	167. (3)	134.	32.	43.	47.	8.	68.	12.
6 Indiana	1	260. (10)	110. (10)	86.	24.	25.	32.	26.	68.	10.
7 Kutztown	9	335. (5)	141. (6)	109.	32.	54.	31.	34.	76.	10.
8 Lock Haven	13	480. (1)	214. (1)	130.	84.	61.	35.	63.	108.	
9 Mansfield	7	261. (9)	112. (9)	76.	36.	25.	28.	44.	52.	4.
10 Millersville	8	249. (11)	112. (8)	82.	30.	32.	20.	15.	69.	10.
11 Shippensburg	3	169. (13)	86. (13)	65.	21.	21.	13.	13.	36.	21.
12 Slippery Rock	5	353. (3)	161. (4)	138.	23.	26.	18.	80.	68.	19.
13 West Chester	2	195. (12)	110. (11)	88.	22.	23.	16.	13.	33.	26.
Pa. Average		271.	130.	95.	35.	36.	27.	31.	54.	26.
NORMAL SCHOOL STANDARDS										
Eight selected schools		233.	151.	118.	39.	17.	7.	11.	30.	14.
Thirty unselected schools with two-year course		225.	126.	....	....	21.	28.	12.	40.	110.
Eight unselected schools with more than two-year course		193.	128.	....	....	18.	14.	6.	26.	8.
Minnesota schools		....	78.	....	....	19.	3.	....	19.	....
Wisconsin schools		313.	178.	....	....	19.	9.	7.	29.	39.
Six Massachusetts schools		370.	222.	154.	67.	35.	4.	28.	79.	51.

TABLE 36.

EXPENSES AND CAPITAL OUTLAY PER CAPITA STUDENT ENROLLED PER ATTENDANCE WEEK, 1921-22.
(An Attendance Week is the Attendance of One Student for One Week.)

No.	NORMAL SCHOOLS	Rank in size	Total expenses	Total instruction	Instruction in normal school	Instruction in training school	General control	Auxiliary agencies	Maintenance	Operation of school	Capital outlay
1	Bloomsburg	4	$6.13	$2.43	$2.04	$1.38	$ .56	$ .77	$ .62	$ .73	$ .51
2	California	6	5.89	2.20	1.32	.88	.78	.80	1.26	.83	.28
3	Clarion	12	5.87	2.90	2.56	.33	1.10	.54	.51	1.02	1.46
4	East Stroudsburg	10	9.44	4.46	2.87	1.58	2.25	.73	.51	1.17	1.49
5	Edinboro	11	7.44	3.70	2.98	.72	.96	1.05	.17	1.50	.27
6	Indiana	1	5.77	2.44	1.91	.53	.55	.70	.56	1.50	.22
7	Kutztown	9	7.44	3.13	2.42	.71	1.19	.68	.75	1.68	.21
8	Lock Haven	13	10.67	4.74	2.88	1.85	1.35	.76	1.39	2.40	....
9	Mansfield	7	5.79	2.49	1.68	.80	.55	.61	.97	1.16	.09
10	Millersville	8	5.53	2.50	1.82	.68	.75	.44	.30	1.53	.21
11	Shippensburg	3	3.75	1.90	1.43	.46	.46	.28	.29	.80	.45
12	Slippery Rock	5	7.84	3.58	3.07	.52	.57	.40	1.77	1.51	.41
13	West Chester	2	4.33	2.43	1.95	.48	.50	.35	.29	.73	.56
	Pa. Average		6.15	2.88	2.11	.77	.79	.60	.69	1.19	.58
	NORMAL SCHOOL STANDARDS										
	Eight selected schools		5.18	3.36	2.62	.87	.37	.16	2.36	.64	.29
	Thirty unselected schools with two-year courses		4.99	2.80	.....	.....	.46	.62	.26	.88	2.44
	Eight unselected schools with more than two-year courses		4.28	2.85	.....	.....	.39	.31	.14	.59	.....
	Minnesota schools		.....	1.72	.....	.....	.43	.06	.....	.42	.....
	Wisconsin schools		6.96	3.94	.....	.....	.41	.21	.16	.64	.86
	Six Massachusetts schools		8.22	4.93	3.43	1.50	.78	.09	.65	1.76	1.13

The middle 50 percent of the Normal Schools, comprising seven in number, range in total expense from $335 to $260, a difference of only $75. In comparing these expenses with the standard at the foot of Table 35 (page 106) it will be seen that the average expense of the Pennsylvania schools, $271, is higher than the standard expenses for (1) the selected schools at $233 per student enrolled; (2) the thirty unselected schools with two-year courses at $225 and (3) the unselected schools of more than two-year courses at $193. The expense in all the Wisconsin Normal Schools averages $313 and in the Massachusetts Schools $370, which is considerably higher than the Pennsylvania average of $271.

Instructional Expense.—Table 35 distributes the total per capita expense of instruction for each Normal School and Table 36 (page 107) distributes the same data on the basis of an attendance week. This expense ranges from $214 in School No. 8 to $86 in School No. 11, while the seven schools comprising the middle 50 percent range from $161 in School No. 12 to $110 in School No. 6. In comparing the average of $130 per student for the entire group with the standards given at the foot of the column it will be seen that the cost of instruction per student is practically the same, except in the Wisconsin Normal School with $178, the selected schools with $151 and the Massachusetts Normal Schools with $222.

These comparisons in expenses in the different items among the various schools could be continued almost indefinitely, consequently it might be well to examine Table 37 (page 109), where all of the items of expense are ranked for all of the schools and from which comparisons can be more readily observed.

Analysis of Expenses.—In studying the expenses of the Normal Schools in the various component parts it will be seen in Table 37 that School No. 8 ranks highest in total expenses, total instruction, Training School, and operation, and that School No. 4, ranking 2 in total expenses, ranks 1 in expenses of general control and 2 in expenses for instruction and Training School. It is equally significant that Schools Nos. 13 and 11, with high total enrollments and ranking 12 and 13 in total expenses and in expenses of general control, rank 12 and 13 respectively in instruction and have an average rank of 11.1 and 12.3. In fact these two schools rank 11 or lower in all items of expense except in Normal School

TABLE 37.

Rank in Expenses per Capita Student Enrolled per Attendance Week for 1921-22.
(Based on Table 36.)

No.	NORMAL SCHOOLS	Rank in size	Total expenses	Total instruction	Instruction in normal school	Instruction in training school	General control	Auxiliary agencies	Maintenance	Operation of school plan	Average rank
1	Bloomsburg	4	6	5	7	3	9	3	3	13	6.1
2	California	6	7	12	13	4	6	2	6	10	7.4
3	Clarion	12	8	7	5	13	5	9	8	9	8.0
4	East Stroudsburg	10	2	2	4	2	1	5	9	7	4.0
5	Edinboro	11	4	3	2	6	4	1	13	5	4.6
6	Indiana	1	10	10	9	9	10	6	7	6	8.3
7	Kutztown	9	5	6	6	7	3	7	5	2	5.1
8	Lock Haven	13	1	1	3	1	2	4	2	1	1.7
9	Mansfield	7	9	9	11	5	11	8	4	8	8.1
10	Millersville	8	11	8	10	8	7	10	10	3	8.3
11	Shippensburg	3	13	13	12	12	13	13	12	11	12.3
12	Slippery Rock	5	3	4	1	10	8	11	1	4	5.2
13	West Chester	2	12	11	8	11	12	12	11	12	11.1

TABLE 38.

Expenses in Percentages for 1921-22. (Based on Table 34.)

No.	NORMAL SCHOOLS	Rank in size	Total expenses	Total instruction	Instruction in normal schools	Instruction in training school	General control	Auxiliary agencies	Maintenance	Operation of school plant
1	Bloomsburg	4	100	56	33	23	9	13	10	12
2	California	6	100	37	22	15	13	14	21	15
3	Clarion	12	100	49	43	6	15	9	9	18
4	East Stroudsburg	10	100	47	30	17	27	8	5	13
5	Edinboro	11	100	50	40	10	13	14	3	20
6	Indiana	1	100	42	33	9	9	12	9	28
7	Kutztown	9	100	42	32	10	16	9	10	23
8	Lock Haven	13	100	44	27	17	13	7	13	23
9	Mansfield	7	100	43	29	14	9	10	18	20
10	Millersville	8	100	45	33	12	13	8	6	28
11	Shippensburg	3	100	50	38	12	12	9	8	21
12	Slippery Rock	5	100	46	39	7	7	5	23	19
13	West Chester	2	100	56	45	11	12	8	7	17
	Average	.....	100	47	34	13	13	10	11	19

instruction as in the case of School No. 13. Schools Nos. 5 and 8 with low total enrollments rank 4.6 and 1.7, respectively, among the schools having the highest average rank in expenses. There is in general a relative close agreement in the rank of the various items of expense when considered comparatively among the different schools; however, there is here and there an outstanding exception, for example, School No. 1 ranks 6 in total expenses, 9 in general control, 5 in total instruction, and 3 in maintenance, Training School and auxiliary agencies. School No. 4 ranks 1 or 2 in total expenses, general control, instruction, and Training Schools, yet it ranks 7 in operation and 9 in maintenance. School No. 12 ranks 3 in total expenses, and yet in general control it ranks 8, in total instruction 4, in Training School 10, in operation 4, and in maintenance and Normal School instruction 1. In fact the average of the ranks found in the last column of Table 37 is a figure indicating in a general way the relative standing of each of the schools in expenditures. When comparing these averages with the rank in size in Column 1, it is at once evident that an inverse ratio exists between the schools with the lowest average rank in expenses and the highest rank in attendance, and vice versa.

These differences in rank can probably in the main be attributed to local needs, and to the early individual development of each school under private control without any state standardization. Here and there the differences probably can also be attributed to dissimilar ideals in planning the work of a state Normal School, since in some cases it is known that practically no expense is spared in developing a Training School, because it is believed the better organized this department of the school is, the more efficiently the Normal School can serve its real purpose of training public school teachers. Another school will keep down this expense through some kind of local public school arrangement and thus be enabled to appropriate a larger percentage of the receipts to other phases of the school's developments such as general control, auxiliary agencies and operation. Again, the managements of the different schools have adopted widely diversified salary schedules. This is an important factor in explaining the great variation in expenses since instruction alone comprises 47 percent of the total expenses for all the Normal Schools. In general the cost of maintaining some of the Normal Schools is

very much out of proportion to the standards as evidenced by the average figures for all the schools combined. These facts will be given further consideration in connection with the apportionment of the appropriations among the various schools and the analysis of the appropriations in relation to expenditures.

Training Schools.

Table 39, Column 2, shows the cost per graduate of the Training Schools for the year 1921-22, and the average cost for all the Normal Schools of $135 with a range from $62 in School No. 13 to $382 in School No. 8. This difference can be explained since the former school with a large graduating class utilizes public school facilities at a much lower cost than the latter which owns, controls and finances its Training School with approximately the same gross cost, but on a basis of a small graduating class. School No. 1 has a student body and graduating class nearly as large as School No. 13, yet it expends in its Training School over twice the total amount expended by the latter, and on the basis of the number of graduates it expends just five times as much, viz., $311 per graduate. On a weekly attendance basis School No. 1 costs $6.92 in comparison with $1.38 in School No. 13. Here again, School No. 8 with its small attendance and relatively small graduating class costs $8.49 per week, which is $5.49 higher than the average amount of $3 for all of the Normal Schools.

TABLE 39.

Cost of Training Schools per Normal School Graduate and per Training School Pupil per Year and per Attendance Week.

No.	NORMAL SCHOOLS	Rank in size	Per graduate per year	Per graduate per week	Per training school pupil per year	Per training school pupil per week
1	Bloomsburg	4	$311	$6.92	$65	$1.45
2	California	6	243	5.40	48	1.08
3	Clarion	12	133	2.97	23	.52
4	East Stroudsburg	10	253	5.63	45	1.00
5	Edinboro	11	127	2.83	22	.50
6	Indiana	1	97	2.16	34	.76
7	Kutztown	9	104	2.32	35	.79
8	Lock Haven	13	382	8.49	97	2.16
9	Mansfield	7	106	2.36	38	.85
10	Millersville	8	78	1.73	55	1.23
11	Shippensburg	3	115	2.56	31	.68
12	Slippery Rock	5	110	2.46	59	1.32
13	West Chester	2	62	1.38	9	.21
	Average	.....	135	3.00	34	.76

Somewhat similar variations can be pointed out in the cost of the Training Schools per pupil both on the yearly and weekly bases, as shown in Columns 4 and 5 of Table 39 (page 111). These differences in the cost of this one item of expense can undoubtedly be accounted for first because of the type of training necessitated by local public school conditions, and second on the basis of the policy of individual Normal Schools to develop the Training Schools as their most essential feature with a consequent higher cost. This is especially clear in Schools Nos. 1, 4 and 8, although in the latter schools the proportionately high cost is also caused by the relatively small student body and small graduating class.

To analyze thoroughly the expenses of the Normal Schools would entail a great deal of time and expense and would necessitate visits to each of the schools to get first-hand information and data. Undoubtedly other items and expenses can be accounted for, as are the expenses of the Training Schools, by the local limiting conditions and the varied Normal School ideals as to teacher training. The short-sighted policy in the management of some of the schools during the period of private ownership and control has brought about conditions in some of the schools that would necessarily entail a varied proportion of cost under the item of "maintenance of plant." Differences in practice relative to student welfare have caused a consequent proportionate difference in the auxiliary agency expenses. The general control expense columns show tremendous differences among the schools in comparison with the average for all the schools. On the basis of the expense statements sent to the Auditor-General's Department, it can be very clearly pointed out that certain items in some of the schools are very much in excess of what might be considered reasonable costs, at least in proportion to the needs that the particular expenditure is to serve. It would seem that whatever the system of purchases is, there ought to be a check as to *cost* and *need* before the expense is incurred, especially in major accounts, either on the part of the Local Board of Trustees or some state agency before the account is submitted to the Auditor-General for payment.

Housing Expenses.—Tables 40 and 41 (page 113) which analyze the housing expenses, include the dining hall, dormitory and laundry expenses. It will be seen in Columns 3 and

TABLE 40.

Total Dining Hall Expenses and Expenses per Capita Boarding Student and Total Number of Boarders Including Faculty and Employes per Year and per Attendance Week.

No.	NORMAL SCHOOLS	Rank in size	Total expenses	Per capita boarding student	Per capita student per att. week	Per capita total No. of boarders	Per capita boarder per att. week
1	Bloomsburg	4	$70,026	$212	$4.71	$184	$4.08
2	California	6	54,915	199	4.45	172	3.84
3	Clarion	12	30,611	161	3.60	147	3.29
4	East Stroudsburg	10	70,875	209	4.65	182	4.06
5	Edinboro	11	37,818	186	4.13	186	4.13
6	Indiana	1	107,846	183	4.07	148	3.28
7	Kutztown	9	64,338	240	5.33	199	4.42
8	Lock Haven	13	25,936	186	4.15	158	3.52
9	Mansfield	7	63,555	184	4.10	150	3.34
10	Millersville	8	65,601	160	3.56	.....	.....
11	Shippensburg	3	42,167	119	2.66	99	2.22
12	Slippery Rock	5	55,295	160	3.56	142	3.17
13	West Chester	2	126,241	192	4.29	173	3.85
	Total	.....	815,231	.....	.....	.....	.....
	Pa. average	.....	62,710	180	4.00	177	3.95
	NORMAL SCHOOL STANDARDS						
	Illinois State	.....	31,543	303	6.73	265	5.89
	Bridgewater, Mass.	.....	54,103	206	4.57	157	3.48

TABLE 41.

Total Dormitory and Laundry Expenses and Expenses per Capita Resident Student and per Total Number of Residents Including Faculty and Employees per Year and per Attendance Week.

No.	NORMAL SCHOOLS	Rank in size	Total expenses	Per capita resident student	Per capita student per att. week	Per capita total No. of residents	Per capita resident per att. week
1	Bloomsburg	4	$25,490	$77	$1.72	$69	$1.54
2	California	6	15,463	59	1.33	51	1.14
3	Clarion	12	15,151	80	1.78	73	1.62
4	East Stroudsburg	10	24,430	72	1.61	62	1.40
5	Edinboro	11	17,318	101	2.25	101	2.25
6	Indiana	1	61,461	104	2.32	86	1.92
7	Kutztown	9	22,910	85	1.91	74	1.65
8	Lock Haven	13	17,038	122	2.72	113	2.52
9	Mansfield	7	24,161	70	1.56	57	1.27
10	Millersville	8	43,494	127	2.84	...	....
11	Shippensburg	3	17,736	52	1.18	46	1.03
12	Slippery Rock	5	33,558	97	2.16	86	1.92
13	West Chester	2	42,589	65	1.45	58	1.30
	Total	.....	360,804	.....	.....	.....	.....
	Pa. average	.....	27,754	83	1.87	74	1.65
	NORMAL SCHOOL STANDARDS						
	Illinois State	.....	8,083	77	1.71	72	1.60
	Bridgewater, Mass.	.....	20,332	78	1.73	61	1.36

4 that the yearly and weekly average costs of the table board per student are $180 and $4 with a range of $240 and $5.33 in School No. 7, to $119 and $2.66 in School No. 11. The middle 50 percent of this group ranges in cost from $199 and $4.45 to $161 and $3.60. It is interesting to note that the three most expensive schools show yearly and weekly costs per student of $240 and $5.33, $212 and $4.71 and $209 and $4.65, while the three least expensive ones show an average of $160 and $3.56, $160 and $3.56 and $119 and $2.66 per student respectively.

The average yearly cost in the Pennsylvania Normal Schools per student for dormitory and laundry expenses, as shown in Table 41, is $83 or $1.87 per week. The variation in this expense per student is equally as marked as those of the dining halls. Combining the figures for Pennsylvania schools they show a range of from $295 and $6.55 in School No. 8, the most expensive school, to $174 and $3.86 in School No. 11, the least expensive school.

The Pennsylvania Normal Schools are essentially boarding schools and in this respect differ from those of most of the other states, consequently it has been difficult to obtain comparable data on housing expenses. Such data as were obtainable, however, show that the Illinois State Normal has an average yearly housing cost of $380 or a weekly cost of $8.44 per student, while that of four Massachusetts schools is $303 per year or $6.73 per week, both of which are higher than the average for the Pennsylvania Normal Schools. Since all the Normal Schools charge $7 per week to cover housing expenses, with the exception of School No. 11 which charges $6.50, it is evident that practically all of them are making money in varied amounts. The differences in this expense indicate that some of the schools are spending too much in housing, while others are not spending enough. Every student should be assured a reasonable return in comfort for the amount of money expended, and there should be some standard upon which to base this.

The question naturally arises here as to whether the Normal Schools have the right to charge the student more for housing than is actually expended. Probably some part of the profit should be spent to help finance plant operation, as this can legitimately be called part of the housing expense, or perhaps a certain percent of the cost of heat, light and water should be

transferred to the housing account. It would seem that the State Normal Schools should create a limited reserve fund to be expended at the discretion of the local Board of Trustees on the basis of a fair profit, to be held to cover such unforeseen losses as may occur from time to time in the Housing Department, such as are caused by fluctuations in the cost of food products and unforeseen emergencies in securing help, equipment and supplies.

Of course it must be assumed that if the Normal School does not make a profit through these sources to meet expenses when the state appropriations are inadequate, an equal amount should be supplied by larger state appropriations. The causes and conditions underlying these diversified facts should receive a more extended investigation in order to insure a higher degree of standardization in the distribution of state appropriations.

Salaries of Normal School and Training School Teachers.

Tables 42, 43 and 44 (pages 116, 117 and 118) show the total distribution of salaries paid out on a monthly basis to the teachers of the thirteen Normal Schools according to the requisitions furnished by the Normal Schools to the Auditor-General.

TABLE 42.

TOTAL SALARIES, DISTRIBUTION OF MONTHLY SALARIES AND MEDIAN SALARIES OF ALL NORMAL SCHOOL TEACHERS PER STUDENT ENROLLED AND PER GRADUATE FOR 1921-22.

(Figures in parentheses indicate rank.)

No.	NORMAL SCHOOLS	Rank in Size	Less than $40	$40 to 59	$60 to 79	$80 to 99	$100 to 119	$120 to 139	$140 to 159	$160 to 179	$180 to 199	$200 to 219	$220 to 239	$240 to 259	$260 to 279	$280 to 299	$300 to 319	$320 to 339	$340 to 359	$360 to 379	Principals' Salaries	Total No. of Teachers	Median Salaries	Total Salaries	Per Student Enrolled	Per Graduate 1922
1	Bloomsburg	4	8	1	...	...	4	1	1	3	10	4	9	2	2	1	...	1	...	...	$466	48 (2)	$192 (8)	$93,011	$145 (5)	$727 (4)
2	California	6	1	...	1	...	...	1	1	10	4	1	3	...	1	...	4	1	...	...	393	28 (10.5)	180 (9)	53,341	100 (12)	613 (7)
3	Clarion	12	...	1	1	2	3	1	4	3	2	2	1	4	...	...	...	...	...	...	500	25 (12)	167 (11)	47,488	142 (6)	1249 (1)
4	East Stroudsburg	10	1	...	...	...	...	...	2	4	3	7	1	10	...	1	1	1	...	1	583	32 (8.5)	217 (2)	82,653	207 (2)	738 (3)
5	Edinboro	11	3	2	4	3	1	...	...	1	4	4	4	1	2	1	1	2	...	...	500	34 (6.5)	195 (7)	63,633	172 (3)	677 (6)
6	Indiana	1	...	5	7	...	6	12	13	6	1	9	3	1	1	1	2	1	...	...	725	69 (1)	148 (13)	104,973	113 (10)	455 (9)
7	Kutztown	9	...	...	...	...	...	...	3	4	7	2	4	5	1	...	...	1	...	...	500	28 (10.5)	200 (6)	62,465	135 (7)	442 (10)
8	Lock Haven	13	...	...	...	1	...	...	1	...	1	6	2	1	3	2	...	1	...	...	416	19 (13)	230 (1)	49,397	220 (1)	1008 (2)
9	Mansfield	7	...	...	1	...	2	2	13	2	4	5	...	2	...	...	...	1	...	1	575	34 (6.5)	159 (12)	63,727	120 (8)	352 (11)
10	Millersville	8	...	...	...	1	...	3	1	14	3	2	...	...	5	...	...	2	...	...	466	32 (8.5)	176 (10)	61,711	117 (9)	301 (13)
11	Shippensburg	3	...	...	...	...	2	...	...	12	4	12	3	...	1	1	1	...	...	...	500	37 (4)	202 (5)	60,181	88 (13)	585 (8)
12	Slippery Rock	5	...	...	...	...	...	3	3	3	6	11	1	...	...	3	1	2	2	...	625	36 (5)	205 (4)	82,819	153 (4)	726 (5)
13	West Chester	2	7	...	...	...	2	3	4	3	...	5	7	...	5	1	3	1	...	...	500	42 (3)	208 (3)	90,404	107 (11)	307 (12)
Total		.....	20	9	14	7	20	26	46	65	49	70	38	26	21	11	13	14	2	2	.....	464	.....	915,803	.....	.....
Pa. Average		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	519	36	190	.....	130	509
NORMAL SCHOOL STANDARDS																										
Eight selected schools																								$808,647	$166	$953
Thirty unselected schools with two-year course																								1,507,863	116	596
Eight unselected schools with more than two-year course																								698,176	121	650
Minnesota schools																								863,811	144	1,098
Wisconsin schools																								983,200	175	.....
Massachusetts schools																								177,304	138	308

TABLE 43.

Total Salaries, Distribution of Monthly Salaries and Median Salaries of Normal School Teachers per Student Enrolled and per Graduate for 1921-22.

(Figures in parentheses indicate rank.)

No.	NORMAL SCHOOLS	Rank in Size	Less than $40	$40 to 59	$60 to 79	$80 to 99	$100 to 119	$120 to 139	$140 to 159	$160 to 179	$180 to 199	$200 to 219	$220 to 239	$240 to 259	$260 to 279	$280 to 299	$300 to 319	$320 to 339	$340 to 359	$360 to 379	Principals' Salaries	Total No. Teachers	Median Salary	Total Salaries	Per Student Enrolled	Per Graduate 1922
1	Bloomsburg	4	2	1	...	...	4	1	1	3	...	4	9	1	2	...	...	1	...	...	$466	30	$215 (5)	$58,513	$ 92 (7)	$ 457 (6)
2	California	6	1	...	1	...	...	1	1	10	4	1	3	...	1	...	3	1	...	...	393	28	180 (9)	35,425	66 (13)	407 (7)
3	Clarion	12	...	1	1	2	3	1	4	3	2	2	1	4	...	...	...	...	...	...	500	25	163 (11)	42,604	128 (5)	1,121 (1)
4	East Stroudsburg	10	1	...	...	...	...	...	1	1	2	5	1	7	...	1	...	1	...	1	583	21	230 (2)	56,749	143 (3)	507 (5)
5	Edinboro	11	3	2	1	1	1	...	...	1	4	4	4	1	2	1	1	2	...	...	500	29	207 (6)	53,223	144 (2)	566 (4)
6	Indiana	1	...	1	3	...	4	8	11	5	1	9	3	1	1	1	2	1	...	...	725	52	156 (13)	84,044	90 (9)	365 (9)
7	Kutztown	9	...	...	...	...	...	...	3	4	1	1	3	5	1	...	...	...	...	...	500	19	220 (2)	50,115	109 (6)	355 (10)
8	Lock Haven	13	...	...	...	1	...	...	...	...	1	2	2	1	2	2	...	...	...	...	416	12	240 (1)	32,801	146 (1)	369 (2)
9	Mansfield	7	...	...	1	...	...	2	6	2	3	4	...	2	...	...	...	1	...	1	575	23	183 (12)	46,005	86 (11)	254 (11)
10	Millersville	8	...	...	...	1	...	3	1	14	3	2	...	...	5	...	...	2	...	...	466	32	173 (10)	47,682	91 (8)	233 (13)
11	Shippensburg	3	...	...	...	...	2	...	...	10	4	11	1	...	1	1	1	...	...	...	500	32	200 (8)	48,348	71 (12)	390 (8)
12	Slippery Rock	5	...	...	...	...	...	2	3	3	4	8	1	...	...	3	1	2	1	...	625	29	202 (7)	71,097	131 (4)	624 (3)
13	West Chester	2	6	...	...	...	...	1	2	3	...	2	5	...	5	1	3	1	...	...	500	30	220 (4)	73,341	87 (10)	249 (12)
	Total	.....	14	5	7	5	14	19	33	59	29	55	33	22	20	10	11	12	1	2	.....	363	.....	699,917	.....	.....
	Average	.....	.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	519	.....	193	.....	98	383

TABLE 44.

Total Salaries, Distribution of Monthly Salaries and Median Salaries of Training School Teachers per Student and per Graduate for 1921-22.

(Figures in parentheses indicate rank.)

No.	TRAINING SCHOOL	Rank in Size	Less than $40	$40 to 59	$60 to 79	$80 to 89	$100 to 119	$120 to 139	$140 to 159	$160 to 179	$180 to 199	$200 to 219	$220 to 239	$240 to 259	$260 to 279	$280 to 299	$300 to 319	$320 to 339	$340 to 359	Total No. of Teachers	Median Salaries	Total Salaries	Per Students Enrolled	Per Graduate 1922
1	Bloomsburg	4	6	...	...	...	...	...	...	...	10	...	...	1	...	1	...	...	...	18	$186	$34,497	$53 (3)	$269 (2)
2	California	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	.....	.....	17,916	34 (4)	205 (4)
3	Clarion	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.....	.....	4,885	14 (13)	128 (5)
4	East Stroudsburg	10	...	...	...	...	...	...	1	3	1	2	...	3	...	...	1	...	...	11	205	25,904	65 (2)	231 (3)
5	Edinboro	11	...	...	3	2	...	...	...	...	...	...	...	...	...	...	...	...	...	5	76	10,409	28 (6)	110 (6)
6	Indiana	11	...	4	4	...	2	4	2	1	...	...	...	...	...	...	...	...	...	17	105	20,929	22 (9)	90 (10)
7	Kutztown	9	...	...	...	...	...	...	...	...	6	1	1	...	...	...	...	1	...	9	195	12,350	27 (7)	87 (11)
8	Lock Haven	13	...	...	...	...	...	...	1	...	...	4	...	...	1	...	...	1	...	7	212	16,596	74 (1)	338 (1)
9	Mansfield	7	...	...	...	...	2	...	7	...	1	1	...	...	...	...	...	...	...	11	150	17,721	33 (5)	97 (8)
10	Millersville	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.....	.....	14,029	26 (8)	68 (12)
11	Shippensburg	3	...	...	...	...	...	...	...	2	...	1	2	...	...	...	...	...	...	5	210	11,833	17 (12)	95 (9)
12	Slippery Rock	5	...	...	...	...	...	1	...	...	2	3	...	...	...	...	...	...	...	7	203	11,721	21 (10)	102 (7)
13	West Chester	2	x	...	...	...	2	2	2	...	...	3	2	...	...	...	...	...	1	11	155	17,063	20 (11)	58 (13)
	Total		6	4	7	2	6	7	13	6	20	15	5	4	1	1	2	2	1	101	.....	216,459	.....	.....
	Average		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.....	180	.....	38	120

x Forty public school teachers in addition are used by this school as critic teachers.

Table 42 (page 116) shows that the median monthly teachers' salary for all Normal Schools combined is $190. The median salaries for the individual Normal Schools range from $230 in School No. 8 to $148 in School No. 6. Among the Normal Schools constituting the middle 50 percent of the group the range extends from $205 in School No. 12 to $176 in School No. 10, a difference of $29. It is interesting to note that the median salary for the group of all Normal Schools, $190, is practically the midpoint between the extremes of this middle group of seven. The extreme differences, therefore, in these median salaries will be found at the low end of the distribution in Schools Nos. 6, 9 and 3 and the upper end of the distribution in Schools Nos. 8, 4 and 13.

Naturally the median salaries do not tell the complete story concerning the differences that prevail among the thirteen Normal Schools. The complete range in salaries for example in School No. 6 extends from $40 per month to $340 per month, while in School No. 7 and School No. 8 with one exception, it extends from $140 to $340 per month. Additional information is necessary in order to make a more complete study of the salaries paid in the same departments of the different schools, and among the instructors of the same and different ranks in each school respectively. However, Tables 43 and 44 (pages 117 and 118) show conclusively that these variations in complete distribution of median salaries do exist in faculties as constituted both in the Normal School and in the Training School.

In the next to the last column of Table 42 (page 116) will be found the amount of salary paid per student enrolled for all the Normal Schools, viz., $130, and also for each of the individual Normal Schools ranking from $220 per student in School No. 8 to $88 per student in School No. 11. The average salaries among the seven schools constituting the middle 50 percent of the group range from $153 to $113 per student. Comparing these with the rank of the schools in student enrollment it will be noticed that School No. 11, ranking 13 in salary per student, ranks 3 in size. This school while ranking 4 in number of teachers also ranks 2 in the largest number of students per teacher (Table 33) and 5 in median salary. It is clear, therefore, that the low per capita cost in salary is largely due to the smaller faculty per student enrolled, and also on account of a median salary slightly above

the median for all the Normal School teachers. School No. 2 ranks 12 in the amount of money paid in salary per student, while it ranks 6 in total enrollment and 9 in median salary. However, this same school ranks 3 in the large number of students per teacher (Table 33) and 10 in the size of its faculty. Consequently it is quite evident that the lower cost per student is due to the low salaries paid and the smaller faculty per student enrolled. School No. 6 ranking 10 in per capita total salary also ranks 8 in teachers per number of students enrolled (Table 33), but it ranks 13 or lowest in the median salaries paid per teacher.

Special attention is called to the high instructional expense of School No. 8, which ranks highest in total salaries paid per student enrolled, highest in median salary paid per teacher and 12 or next to the smallest in student enrollment per teacher (Table 33). Another case in point is that of School No. 4, which ranks 2 in highest total salaries per student enrolled, 2 in the highest median salaries paid per teacher, 11 in the number of teachers per student enrolled (Table 33), and 10 in size, indicative of the high amount of salary per student due to the higher salaries and the smaller percentage of students per teacher. School No. 5 ranks 3 in the total amount of salary paid per student enrolled, 7 in median salary paid, 11 in size and 13 in the smallest number of students per teacher. This again illustrates that the higher costs of salary per student is due, not so much to the higher median salary, but rather to the size of the school and the large faculty as shown by the small number of students per teacher.

In the last column of Table 42 (page 116) the total salaries are distributed on the basis of the number of graduates in 1922. It will be observed that the variations per graduate are even greater than the variations in salaries per student enrolled, also that the causes for these variations in the different schools are due to the number of graduates exclusively and also to the number of graduates in proportion to the entire student body.

The Pennsylvania average teacher's salary per student enrolled, $130, is higher than the group averages of the unselected schools with two-year courses of $116 and the unselected schools with more than two-year courses of $121, while it is lower than that of the individual states with the Minnesota schools of $144, the Wiscon-

sin schools of $175 and the Massachusetts schools of $138 and the selected schools of $166.

In Table 43 (page 117) a complete distribution of the salaries of Normal School teachers exclusive of the Training School faculties is shown on a monthly basis for each of the Normal Schools and for all the Normal Schools combined. The median for Pennsylvania Normal School teachers is $193 per month. School No. 8 ranks highest with a median of $240 and School No. 6 lowest with a median of $156. The salaries of the middle 50 percent of the group extends from $220 to $173, a difference of $47 in salaries per month between the Normal Schools ranking 4 and 10 among the group. The three schools paying the highest salaries per student enrolled are Nos. 8, 5 and 4, with $146, $144 and $143 respectively, and the three schools paying the lowest salaries are Nos. 2, 11 and 9, with $66, $71 and $86 respectively. In other words the rank of the middle 50 percent, seven schools, extends from $131 to $87, a difference of $47 per student enrolled. The difference in salaries per month between the first and thirteenth school in rank is $80, an amount $14 greater than the amount expended per student in the Normal School ranking lowest in the list.

In Table 44 (page 118) the salaries paid in the Training School departments are analyzed. It will be seen that the median salary is $180, the average per capita cost of Normal School student enrolled is $38 and the cost per Normal School graduate is $120. This variation in the salaries of the Training School faculties exists among the different Normal Schools in much the same proportion as has been pointed out in the Normal School faculties and of all the Normal School teachers combined.

Since the departments in the various schools administering the uniform state course of study are practically the same, it is evident that (1) some of the schools are either paying salaries which are too high or others are paying salaries which are too low for the same quality of work, and (2) some of the schools have too many teachers per student, or some do not have enough. These facts are vital since instruction constitutes 47 percent of the total Normal School expenses ranging from 37 percent in School No. 2 to 56 percent in Schools Nos. 1 and 13, with the others distributed between a 40 and 50 percent range (Table 38).

Many of these schools with the larger teaching force per student enrolled could accommodate a much larger number of students without making substantial additions to their faculties, but these schools are receiving more money proportionately with their small student body, than other schools with larger pupil enrollments and consequently additional departments and personnel, irrespective of their service to the state. These facts demonstrate the importance of a most careful consideration of the variations in salaries, since this expense constitutes the chief item in the amount of the appropriation to be apportioned to the different schools by the State Department of Public Instruction.

The Purpose of and Need for Normal Schools in the State and the Facilities for Meeting Such Needs.

According to investigations made by the Teachers' Bureau of the State Department of Public Instruction[1] the number of new teachers required in Pennsylvania each year is upwards of five thousand. In 1919 there were approximately 1,850 prospective teachers graduated from the Pennsylvania State Normal Schools, while it was found that there was need of about 3,000 new teachers in the public schools in the rural districts under the supervision of county superintendents. This would indicate that approximately upward of 2,000 teachers are required in Pennsylvania in the boroughs and cities of over 5,000 population.[2] The Normal School principals reported that in their judgment an average of only about 15 percent of the 1919 graduates entered the rural schools. In other words there were about 275 teachers graduated from the Normal Schools that year to supply the 3,000 vacancies in schools under county superintendents' supervision.[2]

In 1922 there were 1,797 graduates in the thirteen State Normal Schools of Pennsylvania with an average of 138 per school. In reply to questionnaires sent to Normal School principals relative to this year's graduates, they reported that approximately 15 percent of the 1,797 graduates or 265 teachers entered the rural schools. It must be remembered that this number includes those teaching in rural High Schools and Graded Schools and that the number of Normal School graduates entering the 10,000 one-teacher schools of the state is negligible. According to the Normal

[1]Study in Teacher Shortage, Department of Public Instruction, 1919-20. (Unpublished.)
[2]King, LeRoy A.—Status of Rural Teachers in Pennsylvania, U. S. Bulletin No. 34, 1921.

School principals, approximately 90 percent of the graduates of Normal Schools who are teaching are employed in the cities and boroughs of the state.

In June, 1923, there will be in round numbers 2,450 Normal School students graduated with certificates to teach in the state of Pennsylvania, a considerable increase over 1922. If the percentage of teachers entering the rural schools is about the same as in 1919, and there is no evidence to think otherwise, there will be approximately 350 teachers entering rural schools, leaving a balance of 2,100 graduates to fill the vacancies in the cities and boroughs exclusive of Philadelphia and Pittsburgh. There will still remain at least 2,500 to 3,000 vacancies to be filled over the state should the graduates of the Normal Schools all teach in Pennsylvania.

In response to a questionnaire, only three of the Normal School principals reported that their schools are practically filled to their capacity. The remainder of the schools reported that approximately 1,100 boarding students and 1,300 day students can be accommodated in addition to the 1922-23 enrollment. If to these totals is added the 1,000 students (see Table 49) enrolled in the secondary school departments and the special courses not authorized to give certificates at their completion, it is apparent that approximately 3,400 additional students could be accommodated in the Pennsylvania Normal Schools this year for preparation to teach in the public schools of the state.

Excluding Philadelphia and Pittsburgh with their own Normal Schools it is extremely doubtful from the above figures whether the Normal Schools can supply for some time to come the teacher needs in our rural districts through our present Normal School organization. The Normal School principals with the approval of the State Superintendent of Public Instruction organized a new Normal School course particularly intended to specialize in the training of elementary, junior high school, and rural school teachers. Six of the Normal School principals report that in 1922-23—the present year—not a single student in their schools has elected the rural school course. They report that there is a general feeling among the students that they do not wish to teach in the rural schools on account of the teaching and living conditions and in most cases the lower salaries. On the basis of these facts, it

would seem that the Normal Schools are not of direct service in training teachers for the rural schools. In 1920 there were, for example, as few as one or two Normal School graduates among the 150 or 175 one-room rural schools in some counties of the state.[1]

The question might be raised in this connection whether the Normal Schools should not organize ways and means, apart from the regular and special courses, to train rural school teachers both in preparation and in service, for the state of Pennsylvania. How can this be accomplished? Undoubtedly many prospective teachers and teachers in service are receiving training through the extension courses or the summer sessions. In fact one of the Normal School principals just recently stated that he believed that the best service that his school can render in the way of training rural school teachers is to provide a type of extension course that will reach the rural school teachers in service in the rural districts.

If the training of teachers is to be accomplished in part through the extension courses, then instead of the extension work being necessarily self-supporting a certain amount of state appropriation should be designated to be spent definitely for extension work, particularly among the rural school teachers. One of the Normal Schools has established four rural school centers this year in addition to a number of centers in cities and larger boroughs. These rural centers are in part financed by the profits from the larger urban extension classes. It is generally known that most of the extension courses are carried on in the cities where a large proportion of the teachers are already Normal School graduates, and where in the case of a number of schools, an extra tuition charge is made for granting credits which are forwarded to some college or university. This is not the kind of Normal School extension work that is most needed in the state to help train the 5,000 or more teachers with inadequate academic and professional training. It is the latter group that needs the Normal School training for which adequate state appropriation should be allotted.

The Normal Schools are also training a constantly growing number of summer session students as shown by the enrollments of 1921 and 1922. (See Tables 33 and 49.) It would probably be a wise provision if a definite amount of money were laid aside to be used exclusively for the training of teachers in the summer

[1]King, LeRoy A.—Status of Rural Teachers in Pennsylvania, U. S. Bulletin No. 34, 1921.

sessions. In other words, might it not be well for the state to appropriate a certain amount of money to the Normal Schools (1) to train teachers in the regular courses and such special courses as are authorized for which certificates are issued, (2) to train teachers in the summer sessions, and (3) to train teachers in service through extension work, particularly extension work to reach the rural school teachers?

Again, it should be pointed out that more than twenty states in the United States are now providing teacher training for rural teachers through the High Schools and the County Training Schools subsidized by the state. It is not our purpose to enter into the merits of this question as to whether or not such a temporary agency should be established for the training of the teachers in Pennsylvania. However, it should be considered in answering the question of whether all money for teacher-training purposes should be exclusively appropriated to the Normal Schools as the chief agency for the training of public school teachers, or whether a larger amount should be appropriated to help finance all teacher-training work in the state, part of this to be used for such temporary agencies apart from the State Normal Schools and Schools or Departments of Education in colleges and universities.

The Normal Schools of Pennsylvania as now constituted are not adequately serving the needs of rural schools. It is believed that a step forward would be taken if a careful study could be made of such constructive measures as would especially train teachers for the rural and small community schools, to be subsidized by sufficient appropriation of state money to make such training facilities possible.

Normal School Receipts and State Appropriation.

The total amount of money appropriated to the Normal Schools of Pennsylvania for the two-year period 1921-23 was $5,112,622.25. While this amount includes all the money that the Normal Schools were to receive during the two-year period, it should be pointed out that it also includes $212,306.25 reappropriated from a balance from previous appropriations to be used largely to meet deficits. The difference of $4,900,000 was the total amount appropriated

to Normal Schools by the last Legislature. This amount as is shown in Table 45 (page 127) was apportioned as follows:

Instructional, Operating and Maintenance	$2,993,000.00
Liquidation of Normal School mortgages and indebtedness	825,000.00
Alterations and repairs	500,000.00
Maintenance—a deficiency appropriation for previous years	582,316.00
Reappropriation to be apportioned among the Normal Schools upon the basis of the number of students	212,306.25
Total	$5,112,622.25

The allotment of these various amounts to the respective Normal Schools is indicated in Tables 45 and 46 (pages 127 and 128). According to the record of the Auditor-General as of August 1, 1922, practically all of the student-tuition reappropriated balance was distributed to the Normal Schools. Only $90,900 out of the $825,000 for the liquidation of Normal School mortgages and indebtedness had been expended at that time. In the case of the maintenance fund and the alteration and repair fund approximately one-half of the amounts appropriated were distributed for the first year of the appropriation period. The deficiency appropriation was distributed among the State Normal Schools in amounts as found in Column 4 of Table 45 and are identical with the amounts as stipulated in the law. In Column 6 the reappropriated balance of the previous appropriations is distributed to the respective Normal Schools in amounts as determined by the State Department of Public Instruction on the basis of the number of students enrolled in each of the Normal Schools as stipulated in the law. In Column 5 the alteration and repair appropriation is shown as distributed by the State Department of Public Instruction on the basis of the requests and established needs of each of the State Normal Schools. It will be noted that $31,400 of this amount, according to the record submitted from Harrisburg, still remains as a balance to be redistributed among the schools during the balance of the two-year period.

TABLE 45.

Analysis of State Appropriation According to the Auditor-General's Department for 1921-23.

No.	NORMAL SCHOOLS	Rank in size	Amt. apportioned of amt. apportioned for maintenance 1921–22	Amt. requisitioned of amt. apportioned for maintenance 1921–22	Deficiency appropriation for maintenance 1921–23	Amt. apportioned for alterations and repairs 1921–23	Amt. allocated on the basis of number of students 1921–23	Total
1	Bloomsburg	4	$120,000	$120,000	$50,994	$24,000	$16,985	$211,979
2	California	6	85,000	84,776	27,938	38,000	8,492	159,430
3	Clarion	12	85,000	73,288	31,632	45,000	8,492	170,124
4	East Stroudsburg	10	107,500	107,500	64,255	46,000	10,615	228,370
5	Edinboro	11	95,000	94,999	89,769	45,000	8,492	238,261
6	Indiana	1	122,000	125,041 x	45,162	30,000	29,723	226,885
7	Kutztown	9	85,000	85,000	51,965	26,000	14,861	177,826
8	Lock Haven	13	85,000	76,789	70,896	20,000	4,246	180,142
9	Mansfield	7	108,000	108,002	.....	50,600	27,600	186,200
10	Millersville	8	90,000	75,004	36,239	33,000	16,985	176,224
11	Shippensburg	3	90,000	89,991	9,905	25,000	16,985	141,890
12	Slippery Rock	5	120,000	120,000	74,226	34,000	14,861	243,087
13	West Chester	2	122,000	122,000	29,335	42,000	33,969	227,304
	Total	.....	1,314,500	1,282,390	582,316	458,600	212,306	2,567,722

x $3,041 excess deducted from amount apportioned for 1922–23.

An Analysis of State Appropriation According to Appropriation Acts—Session of 1921.

	Instructional, operating and maintenance Normal School	Alterations and repairs State Normal School	Maintenance deficiency appropriation	Liquidation Normal School mortgages and indebtedness	Reappropriation on basis of number of students	Total
Amount appropriated	$2,993,000	$500,000	$582,316	$825,000	$212,306.25	$5,112,622.25

Approximately one-half of the instructional, operating and maintenance fund for the school year 1921-22 was distributed to the respective schools in amounts as indicated in Table 45, Column 1 (page 127). In some of the schools these amounts were not entirely requisitioned as shown in Column 3. In fact the greater portion of the appropriation which remains unexpended to be used during the second year of the appropriation period plus the balance in the case of individual schools remaining from the first year's allotment, will give the schools additional funds with which to take care of the larger enrollments and consequent increased expenses for the school year 1922-23. The liquidation, deficiency and student-tuition funds will not be considered any further since the need for these and their distributions are clearly established.

TABLE 46.

TOTAL STATE APPROPRIATIONS AND APPROPRIATIONS FOR INSTRUCTIONAL, OPERATING AND MAINTENANCE EXPENSE PER STUDENT ENROLLED ON THE BASIS OF PRINCIPALS' REPORTS TO THE STATE DEPARTMENT OF PUBLIC INSTRUCTION.

(Figures in parentheses indicate rank.)

NORMAL SCHOOLS No.	Rank in size	Total state appropriations	Total state appropriation per student enrolled	Appropriation for instructional, operating and maintenance expense	Appropriation maintenance per student enrolled
1 Bloomsburg	4	$134,134	$209 (6)	$120,000	$187 (7)
2 California	6	103,130	193 (9)	82,576	154 (9)
3 Clarion	12	87,168	260 (4)	65,166	193 (5)
4 East Stroudsburg	10	132,541	333 (3)	107,500	270 (2)
5 Edinboro	11	132,640	359 (2)	95,151	257 (3)
6 Indiana	1	125,041	134 (13)	125,041	134 (12)
7 Kutztown	9	93,168	202 (7)	85,000	184 (8)
8 Lock Haven	13	86,877	387 (1)	77,275	344 (1)
9 Mansfield	7	103,381	195 (8)	101,281	191 (6)
10 Millersville	8	75,004	142 (12)	75,004	142 (11)
11 Shippensburg	3	106,200	155 (11)	89,856	131 (13)
12 Slippery Rock	5	131,945	244 (5)	107,180	198 (4)
13 West Chester	2	137,123	162 (10)	124,799	148 (10)
Total	.....	1,448,357	.....	1,055,786	.....
Pa. Average	.....	111,412	198	95,980	172
NORMAL SCHOOL STANDARDS					
Eight selected schools	.....	165,823	286	.....	.....
Thirty unselected schools with two-year courses	.....	137,992	290	.....	.....
Eight unselected schools with more than two-year courses	.....	171,304	228	.....	.....
Minnesota schools	.....	106,374	107	.....	.....
Massachusetts schools	.....	112,026	103	.....	.....

Column 2 of Table 46 (page 128) contains the amounts received by the Normal Schools for instruction, operation and maintenance, and alterations and repairs. In Column 3 these appropriations are analyzed on the basis of the total number of students enrolled. The average amount received by the schools is $198, with School No. 8, the smallest in size, receiving $387 per student; and School No. 6, the largest in enrollment $134, a difference of $253 per student. The range among the seven schools constituting the middle 50 percent extends from $260 to $162 per student enrolled. The three schools with small enrollment, ranking 13, 11 and 10 in size, received from the state $387, $359 and $333 per student, and the three schools with large enrollment, ranking 3, 8 and 1 in size, received respectively $155, $142 and $134.

In comparing these amounts with the standards at the foot of the table it will be seen that the Pennsylvania State Normal Schools received considerably less per student than the selected group of Normal Schools receiving $286 per student; the unselected schools with more than two-year courses, receiving $228 per student; and the unselected group of thirty Normal Schools with two-year courses receiving $290. However, the average appropriation received by the Minnesota State Normal Schools is only $107 per student, and the Massachusetts Schools $103. On the basis of these standards, with the exception of the Minnesota and Massachusetts averages, it is evident that the Pennsylvania State Normal Schools received from the state, in 1921-22, considerably less than they should have received.

Columns 4 and 5 contain the appropriations for instruction, operation and maintenance exclusively and probably give a fairer basis for comparing the appropriations received by the Normal Schools. Apparently two of the schools did not receive any stated amount for alterations and repairs and those that did received them in quite varied amounts. These figures represent the exact amounts received by the schools as reported by the principals for the fiscal year ending June 1, 1922, and consequently vary slightly with those recorded in Column 3 of Table 45 as reported by the Auditor-General's department which contains some hold-over requisitions and also additional ones recognized since June 1, 1922. In Table 46, Column 4, the amounts received by each Normal School respectively for instruction, operation and

maintenance is also apportioned on the basis of the number of students enrolled, showing an average for all the schools of $172. The range in these amounts received by the individual schools extends from $131 in School No. 6, the first in size, to $344 in School No. 8 with the smallest enrollment. The seven Normal Schools representing the middle 50 percent, range from $198 in School No. 12 to $148 in School No. 13.

In the accompanying Table 47 it will be seen that School No. 8 ranking 13 in size ranks 1 in the state appropriation received per student; School No. 3 ranking 12 in size ranks 5 in amount of state appropriation received per student, and School No. 5 ranking 11 in size ranks 3 in amount of appropriation received per student. In comparing the larger schools, it will further be seen that School No. 6 ranking 1 in size ranks 12 in appropriation received; School No. 13 ranking 2 in size ranks 10 in appropriation received; and School No. 11 ranking 3 in total enrollment and 5 in regular Normal Course student enrollment ranks 13 in appropriation received. In fact this inverse ratio is so pronounced that it indicates a high negative correlation in these ranks, with the exception of several schools about the midpoint. This practically established beyond question that the larger the school the less state money per student the school receives, and conversely, the smaller the school the greater amount of money per student the school receives.

TABLE 47.

NORMAL SCHOOLS COMPARED BY RANKS IN SIZE AND AMOUNTS OF APPROPRIATION RECEIVED PER STUDENT.

	NORMAL SCHOOLS	Total enrollment including one-fourth of summer session and one-fourth of spring session	Complete enrollment excluding summer and spring term	Appropriation maintenance per student total enrollment	Appropriation maintenance per regular student enrollment
		Rank	Rank	Rank	Rank
1	Bloomsburg	4	3	7	6
2	California	6	8	9	8
3	Clarion	12	12	5	4
4	East Stroudsburg	10	10	2	2
5	Edinboro	11	11	3	3
6	Indiana	1	1	12	13
7	Kutztown	9	7	8	7
8	Lock Haven	13	13	1	1
9	Mansfield	7	5	6	9
10	Millersville	8	9	11	10
11	Shippensburg	3	4	13	11
12	Slippery Rock	5	6	4	5
13	West Chester	2	2	10	12

It will be remembered in this connection that in the analysis of the expenses of the Normal Schools there was found a wide variation in the cost of the different departments of the different schools, apart from their size, and that the higher expenses in one item or another occurred principally in the smaller schools. Consequently unless these differences in uniformity of salaries and variations in other departments are removed by more rigid standards on the part of some governmental agency, it is evident that the only alternative on the part of the State Department of Public Instruction, which distributes this part of the State Normal School appropriation, is to consult with the authorities of the individual schools and to arrange for an appropriation proportionate to the amount claimed in order to avoid a deficit.

A more equitable distribution of the state appropriation could probably be made if more consideration were given to (1) relative numbers of students enrolled, (2) the individual school needs, (3) certain measurable efficiency standards, and (4) services to the state through extension courses and summer session activities.

Analysis of Normal School Receipts.

In Tables 48 and 48A (pages 132 and 133) the Normal School receipts from all sources are analyzed and show that an average of 64 percent of all receipts are supplied by state appropriation.

This is very low when compared with the percentage of 91.6 for the selected Normal Schools of the country, 85.5 for the thirty unselected Normal Schools with two-year courses, 91.2 for the unselected Normal Schools with more than two-year courses, 91.4 for the Massachusetts schools, and 87.2 for the Minnesota Normal Schools. The range in state appropriation in proportion to total receipts extends from 80.7 in School No. 8 to 44.7 in School No. 7—a striking difference of 36 percent. Variations similar to those prevalent throughout this study are equally prominent in the analysis of Normal School receipts.

The seven schools constituting the middle 50 percent received 73.8 percent to 62.9 percent, indicating a quartile deviation of 5.5 percent. Therefore, the extreme variation indicated above exists among the six schools constituting the first and third quartile; *viz.*, Schools Nos. 8, 5 and 3, ranking 13, 11 and 12 in

TABLE 48.

Receipts and State Appropriations on the Basis of Principals' Reports to State Dept. of Public Instruction for the Year 1920-21.

No.	NORMAL SCHOOLS	Rank in size	Total	State appropriations	Transfer from housing account	Term fees	Tuition for private instruction	Tuition (other than private lessons)	Received from lecture courses	Athletic contests and guarantees	Other receipts	Money borrowed
1	Bloomsburg	4	$195,426	$134,134	.....	$15,642	$5,093	$3,196	$2,289	$1,082	$6,224	$27,763
2	California	6	163,928	103,130	$13,022	11,435	6,213	18,535	773	816	2,422	7,580
3	Clarion	12	111,863	87,168	2,882	10,524	1,127	4,662	497	1,005	2,373	1,622
4	East Stroudsburg	10	195,696	132,541	16,627	9,560	15	1,084	97	573	1,199	33,997
5	Edinboro	11	168,329	132,640	18,656	9,076	538	184	608	888	5,736	.....
6	Indiana	1	272,471	125,041	92,896	19,750	8,219	11,654	228	415	14,265	.....
7	Kutztown	9	208,196	93,168	22,205	11,170	1,859	30,933	234	45	48,578	.....
8	Lock Haven	13	107,780	86,877	13,060	5,494	718	323	290	112	904	.....
9	Mansfield	7	154,777	103,381	11,279	10,757	7,536	3,593	22	19	5,687	12,500
10	Millersville	8	145,446	75,004	41,189	16,353	1,229	4,148	499	662	5,746	613
11	Shippensburg	3	147,339	106,200	7,809	20,951	1,510	7,168	65	947	2,685	.....
12	Slippery Rock	5	202,685	131,945	22,203	11,915	2,995	9,073	39	235	11,276	13,000
13	West Chester	2	185,801	137,123	20,021	18,035	215	2,287	115	755	7,248	.....
	Total	.....	$2,259,737	$1,448,352	$281,849	$170,662	$37,267	$96,840	$5,758	$7,554	$114,343	$97,075

TABLE 48A.

Receipts and State Appropriations in Percentages for the Year 1921-22.

(Figures in parentheses indicate rank in size.)

No.	NORMAL SCHOOLS	Rank in size	Total	State appropriations	Transfer from housing account	Term fees	Tuition for private instruction	Tuition (other than private lessons)	Received from lecture courses	Athletic contests and guarantees	Other sundry receipts	Money borrowed
1	Bloomsburg	4	100	68.6 (6)	.....	8.0	2.6	1.6	1.2	0.6	3.2	14.2
2	California	6	100	62.9 (10)	8.0	7.0	3.8	11.3	0.4	0.5	1.5	4.6
3	Clarion	12	100	77.9 (3)	2.6	9.4	1.0	4.1	0.5	0.9	2.1	1.5
4	East Stroudsburg	10	100	67.7 (7)	8.5	4.9	.....	0.6	.....	0.3	0.6	17.4
5	Edinboro	11	100	78.8 (2)	11.1	5.4	0.3	0.1	0.4	0.5	3.4	.....
6	Indiana	1	100	45.8 (12)	34.1	7.2	3.0	4.3	0.1	0.2	5.3	.....
7	Kutztown	9	100	44.7 (13)	10.7	5.4	0.9	14.9	0.1	.....	23.3	.....
8	Lock Haven	13	100	80.7 (1)	12.1	5.1	0.7	0.3	0.2	0.1	0.8	.....
9	Mansfield	7	100	66.8 (8)	7.3	7.0	4.9	2.3	.....	.....	3.7	8.0
10	Millersville	8	100	51.6 (11)	28.3	11.3	0.8	2.8	0.3	0.5	4.0	0.4
11	Shippensburg	3	100	72.1 (5)	5.3	14.2	1.0	4.9	0.1	0.6	1.8	.....
12	Slippery Rock	5	100	65.1 (9)	10.9	5.9	1.5	4.5	.....	0.1	5.6	6.4
13	West Chester	2	100	73.8 (4)	10.8	9.7	0.1	1.2	0.1	0.4	3.9	.....
	Average	.....	100	64.0	12.5	7.6	1.7	4.3	0.3	0.3	5.1	4.2
	NORMAL SCHOOL STANDARDS											
	Eight selected schools	.....	.....	91.6	.....	.....	.....	.....	.....	.....	.....	.....
	Thirty unselected schools with two-year courses	.....	.....	91.2	.....	.....	.....	.....	.....	.....	.....	.....
	Eight unselected schools with more than two-year courses	.....	.....	85.5	.....	.....	.....	.....	.....	.....	.....	.....
	Minnesota schools	.....	.....	87.2	.....	.....	.....	.....	.....	.....	.....	.....
	Massachusetts schools	.....	.....	91.4	.....	.....	.....	.....	.....	.....	.....	.....

size, show 80.7, 78.8 and 77.9 percent in total receipts covered by state appropriation and schools Nos. 10, 6 and 7, ranking 8, 1 and 9 in size, show 51.6, 45.8 and 44.7 percent respectively.

It is evident that this negative relationship prevails throughout these proportions just as it did in the student enrollment in the previous discussion on appropriations. It is most significant that two of the Normal Schools should receive from the state 78 and 80 percent of their total receipts for maintaining their schools, while two other schools should receive only 44 and 45 percent.

Naturally the question arises where do the Normal Schools, receiving the small percentages of state appropriation on the basis of their total receipts, make up the differences? This is answered in Table 48A (page 133), where it will be seen that the Normal Schools show receipts from local sources in various amounts such as transfer from housing account, term fees, tuition, borrowed money, etc. It will be seen that money transferred from the housing account is the chief source of revenue apart from state appropriation. School No. 6, receiving the second smallest amount of state appropriation, both per student enrolled and in percent of total receipts, transferred 32.9 percent of total receipts or $87,661 from the housing account to meet the general expenses of the school. School No. 10 receiving 51.6 percent from state appropriations transferred $41,189 from the housing account, an equivalent of 28.3 percent of the total receipts. School No. 7, which received 44.7 percent of its total receipts from the state, transferred only 10.7 percent from the housing account; however, this school has 14.9 percent of its receipts credited to tuition and private lessons, and 23.3 percent to other and sundry receipts.

Usually the schools receiving the larger appropriation of state money in relation to total receipts transfer a relatively smaller proportion from the housing accounts. School No. 1 transferred none, School No. 3 transferred 2.6 percent, School No. 11, 5.3 percent, etc. A study of the entire table is most interesting in that it shows how the receipts are distributed in each school to make up the total. The extreme differences in percentages of state appropriations in Column 2 seem to be the key in explanation of the situation.

Equalized Distribution of State Appropriation.—In analyzing the percentage of state appropriation for each of the Normal

Schools on the basis of the percentage of expenses as found in Table 38 (page 109), it will be found that the state appropriation in most of the schools covers all expenses for instruction and general control and in nine of the schools the state appropriation also covers a fairly good proportion of the expenses for auxiliary agencies. Consequently it would seem that the receipts obtained from other local sources cover the expenses for maintenance, operation of school plant and general control in the schools for which the state appropriation is not large enough to cover these items. Now the question arises whether the state should appropriate more money for the Normal Schools to cover these expenditures not now met by state appropriation or whether the present amount is sufficient, provided the extreme variations in expenses of all kinds, as has been clearly demonstrated, can be adjusted to insure a more equitable distribution.

It has already been shown that Pennsylvania does not appropriate enough money for its Normal Schools compared with the standards obtained for the United States and certain individual states. However, on the basis of per capita population Pennsylvania appropriates 23 cents per inhabitant. In comparison Massachusetts appropriates 19 cents, Minnesota 24 cents, and Wisconsin 33 cents per inhabitant.

The student enrollment has increased this year—1922-23—26.7 percent over the year 1921-22, for which data are presented in Table 49. These increases, according to information submitted by the Normal Schools to the State Department of Public Instruction, vary from no increase in one school all the way to 80 percent in another. In the majority of schools the increases in attendance are in the neighborhood of 25 to 35 percent over the previous year. The enrollment in the summer session for 1922 of 9,159 students—an average of 705 per school—indicates a remarkable increase of approximately 50 percent over the previous session. The Extension Courses this year show a total enrollment of 6,160 students, an average of 474 per school, which is an increase of approximately 85 percent over the enrollment of 1921-22.

However, the gross salary increases have kept pace with the student increases throughout the list. According to the requisition payrolls submitted to the Auditor-General for the months of September and October the Normal School salaries for the year

TABLE 49.

Student Enrollment, Graduates, and Monthly Salaries and Percent Increase in Enrollment and Salaries 1922-23 over 1921-22.

(Figures in parentheses indicate rank.)

Number	NORMAL SCHOOLS	Adjusted total enrollment including spring and summer session.	Regular enrollment excluding spring and summer session.	Regular normal course student.	Students in special courses.	Students in secondary dept.	Graduates 1923	Summer session 1922.	Extension courses 1922-23.	Estimated correspondence 1922-23.	Pupils in training school.	Pupils in training school per graduate.	Monthly normal school salaries 1921-22.	Monthly normal school salaries 1922-23.	Percent increase in enrollment 1922-23 over 1921-22.	Percent increase in salaries 1922-23 over 1921-22.
1	Bloomsburg	874(3)	660(3)	550(3)	70	40	275(2)	855(5)	1200(2)	.....	780(3)	2.1	93,011	110,919	36.6	19.3
2	California	695(5)	477(8)	250(11)	150	77	125(10.5)	873(2)	652(3)	.....	513(7)	4.1	55.341	70,565	30.1	32.3
3	Clarion	466(11)	325(12)	175(13)	.....	150	75(13)	565(10)	93(13)	.....	250(12)	3.3	47,488	55,250	39.1	16.3
4	East Stroudsburg	483(10)	370(10)	335(8)	25x	10	160(8)	451(11)	335(7)	250	710(4.5)	4.3	82,653	97,037	28.9	17.4
5	Edinboro	667(7)	500(7)	450(4)	50x	.....	185(6)	669(6)	633(4)	.....	620(6)	3.3	63,633	85,677	80.8	34.6
6	Indiana	1195(1)	840(2)	590(2)	170x	80	240(3)	1420(1)	1683(1)	250	800(2)	3.3	104,973	154,095	28.5	46.9
7	Kutztown	456(12)	360(11)	285(10)	.....	75	125(10.5)	384(13)	402(5)	.....	420(10)	3.4	62,465	71,975	1.1	13.6
8	Lock Haven	347(13)	205(13)	180(12)	25	.....	100(12)	567(8)	97(12)	.....	180(13)	1.8	49,397	56,300	54.9	13.9
9	Mansfield	665(8)	557(4)	412(5)	120x	25	212(4)	431(12)	108(11)	200	500(9)	2.4	63,727	99,360	25.5	55.9
10	Millersville	550(9)	390(9)	377(6)	0	13	202(5)	640(7)	217(9)	.....	307(11)	1.5	61,711	78,225	4.6	26.8
11	Shippensburg	687(6)	545(5)	375(7)	5	165	175(7)	566(9)	276(8)	5	510(8)	2.9	60,181	81,450	.6	35.3
12	Slippery Rock	724(4)	507(6)	320(9)	45x	142	150(9)	869(3.5)	348(6)	10	710(4.5)	4.7	82,819	105,050	34.3	26.8
13	West Chester	1075(2)	859(1)	859(1)	.....	.....	434(1)	869(3.5)	116(10)	.....	1858(1)xx	4.3xx	90,404	106,475	27.6	17.8
	Total	8885	6595	5158	660	777	2458	9159	6160	665	8158	.....	915,803	1,172,378	.....	.....
	Average	683	538	398	73.4	77.7	188	705	474	133	628	3.3	70,446	90,183	26.7	28.1

x Special three-year courses authorized by State Department of Public Instruction.
xxTraining school figures for year 1921-22.

1922-23 have increased 28 percent over 1921-22. These increases vary from 13 percent in Schools Nos. 7 and 8 to 55 percent in School No. 9. The general increase is in the neighborhood of 25 to 35 percent.

During the past two years the Pennsylvania Normal Schools received from the state a total appropriation of $3,493,000, $2,993,000 for instruction, operation and maintenance and $500,000 for alterations and repairs. In view of the facts presented herein it is doubtful whether most of the schools can possibly operate on less than their proportionate share of an equal amount for the next two-year period. It would seem, in view of the increased enrollment in practically all departments of the normal schools, especially the tremendous increases in the enrollment of the summer sessions and extension courses and the possible additional increases in 1923-24, the second year of the biennium, that more money should be appropriated by the state for instructional, operating and maintenance expenses for the next two years. The salary increases this year over last, as already pointed out, would also confirm this conclusion.

In regard to the alterations and repairs appropriation it is difficult to determine just how much money should be allotted to the schools for this purpose, since the former estimate was made as the result of a careful survey by the Building Department of the State Department of Public Instruction. Undoubtedly a similar survey should again be made to determine the amount of appropriation, since the amount appropriated during the past two years makes it doubtful as to what proportion of the $500,000 should be continued for the next two years.

A careful survey of the Normal Schools should be made as to their maintenance, instructional and operating needs, as in the case of alterations and repairs on the basis of the services rendered the state by each of the Normal Schools through the training of public school teachers. The increases in extension courses and summer session cited above are also a disturbing factor in determining the relative amount of money they should receive. These facts tend to confirm the point of view maintained throughout this study, that definite amounts of the total appropriation be stipulated to maintain these departments. According to the facts disclosed in this study it is evident that some of the schools are receiving too

much money and others certainly not enough on a per student basis or on the basis of the proportion of appropriations to total receipts or expenses. It is difficult to justify the amount of money that some of the schools received, when others are apparently rendering a much greater service to the state, and are obliged to find sources of income in other ways to meet the expenses of running their schools.

Commission.—In this discussion it is evident that the subject of state appropriations for Normal Schools should receive serious consideration either by the *State Council of Education* or a *Normal School Commission* on the basis of the size, need, efficiency, and relative services to the state. It would seem that in order to account for these tremendous variations a more exhaustive study should be made than is here possible. It should be remembered that it was not the assignment to investigate the causes of the facts and conditions as revealed, but rather to point out the necessity for thorough study of the Normal Schools as a state system in order to justify a reasonable and equitable distribution of state money.

CHAPTER IV.

Higher Educational Institutions.

In order to promote higher education in Pennsylvania in conformity with the directions contained in the Constitutions of 1779 and 1791 the Legislature of the Commonwealth has issued charters to certain private institutions. Three of these have for many years had such relations with the Commonwealth with reference to control or support, or both, as to make them to a greater or less degree regarded by the citizens of the state as public or semi-public schools. These institutions are the University of Pennsylvania, whose present charter was granted in 1791, the University of Western Pennsylvania (now called the University of Pittsburgh, which title has been legalized by judicial action), chartered in 1819, and Pennsylvania State College, chartered in 1855, designated as a Land Grant College in 1863, and known as the Pennsylvania State College since 1874.

The Governor of the Commonwealth is president of the board at the University of Pennsylvania and is an ex-officio member of the Board of Trustees of each of the other two institutions. Pennsylvania State College also has upon its board two other officers of the Commonwealth, the Superintendent of Public Instruction and the Secretary of Agriculture. The Mayor of Pittsburgh is an ex-officio member of the board of the University of Pittsburgh. The members of the Board of Trustees of each of the two universities other than the ex-officio members, which include in each case the administrative head of the institution known as the Provost, Chancellor or President, serve for life and select their own successors. It is the practice at the University of Pennsylvania at the present time to permit the alumni of the institution to nominate for a portion of the vacancies. At Pennsylvania State College the trustees are appointed for a term of three years and new members are chosen as follows: Six members appointed by the Governor and confirmed by the Senate; twelve members elected by delegates from certain societies and associations, i. e., three delegates from each county in the Commonwealth represent-

ing organized agricultural interests of the county, and three delegates from each county in the Commonwealth representing the organized engineering, mining, manufacturing and mechanical interests of the county; nine members chosen of and from the alumni by the members of the alumni. One-third of all the above are appointed and elected respectively each year.

The conditions which in the public mind set apart public institutions from private institutions are probably the following: (1) Legal title to property vested in the Commonwealth or a subdivision thereof. (2) All trustees thereof elected by the citizens or by their representatives in a legislative body or appointed by the Governor or some other state or local officer or board. (3) Financial support (except minor fees and income of occasional private gifts or endowments) entirely from the state.

The above conditions are not fully met by the present status of the University of Pennsylvania or the University of Pittsburgh or Pennsylvania State College.

The title to the property of each of these institutions is vested in their respective corporations. However, there are many charitable institutions in Pennsylvania established, maintained and supported out of the funds of the Commonwealth and regarded as purely state institutions, which have the legal title of all their property vested in a corporation formed under the laws of Pennsylvania. The major portion of the plants of the two universities has been secured from private funds, while the property of Pennsylvania State College, except for two or three private gifts of buildings, has been provided for by funds appropriated from the Commonwealth. Inasmuch as the state officials have participated but seldom in the deliberations of the Boards of the two universities and since state officials upon the Pennsylvania State College board together with the one-third which may be considered as representatives of the state do not altogether make up a majority of the Board, it follows that the management of the three schools is in private hands. While they have full control of the property they cannot, however, dispose of it in the same way as a business corporation can do with its property. If any of these institutions would cease to operate, its property would eventually escheat to the state.

Since it seems to have been the policy of the Commonwealth

to have private corporations perform its public educational service and administer certain of its welfare agencies, it would have been consistent for the State Legislature to have constantly granted them public funds for their support from the time of their establishment and to have taken a vital part in the determination of their financial and educational policies. But this was not the plan that was pursued. The state gave practically no support to the two universities previous to 1907, since which time appropriations have been made regularly, nor has it ever sought to exercise any part in the control of them beyond that of designating the definite purpose for which certain minor parts of the general appropriations were to be spent. The same holds true in regard to Pennsylvania State College in so far as regular biennial appropriations have been made since 1887. The trustees have not, however, been permitted to exercise the same freedom of control as the boards of the other two institutions. Both the national funds granted under the terms of the Morrill Act for the support of agricultural and mechanical colleges and those funds contributed by the state in order to make the Morrill funds available must be spent in accordance with the provision of that Act. The same applies to the revenue derived from other federal appropriations. Furthermore, the work done is subject to inspection by federal officers who have the power to withhold the funds if they see fit. The control of state officers or state boards over the institution has not been exercised to any appreciable degree.

Each institution is required by its charter to submit quarterly to the State Auditor a detailed statement of its expenditures from the appropriations.

Another important aspect from which the institutions should be viewed in considering the extent to which they function as public and private institutions is the matter of fees charged students. It would have been possible for the state to have made its grants of money and to have required from these institutions that instruction be given to all students free of charge. This has been done only in the case of Pennsylvania State College and then because of the provisions of the Morrill Act and presumably not because of the acts of the Legislature. But to have made this requirement from these institutions would have necessitated the regular granting of appropriations in considerably larger amounts.

The people of the state preferred not to follow this course, but rather to leave the support of higher education to those who were charitably inclined on the one hand and to those who received its benefits on the other hand. In consequence tuition fees have always been charged at both universities. Pennsylvania State College has, in recent years at least, charged student fees for purposes other than tuition. This is a common practice in all institutions in the United States largely supported by public funds, and the amounts of these fees have increased considerably in the last few years due to the unanticipated rising costs and the necessity that these costs be met without adequate appropriations.

A list of appropriations that have been made to the University of Pennsylvania since the time of its establishment is given in Table 50. It may be considered as typical of both of the universities although the appropriations to the University of Pittsburgh were not made so often as to the University of Pennsylvania, as for example, an appropriation to Lehigh University of $200,000 in 1895 to help it out in a time of financial crisis.

TABLE 50.

STATE APPROPRIATIONS RECEIVED BY THE UNIVERSITY OF PENNSYLVANIA FROM 1749-1923.

1749	
1779	£3,500*
1807	$3,000†
1838	10,000‡
1872	
1873	
1889	12,500
1897–99	150,000
1899–01	
1901–03	
1903–05	100,000
1905–07	100,000
1907–09	100,000
1909–11	280,000
1911–13	695,000
1913–15	820,000
1915–17	750,000
1917–19	926,500
1919–21	1,134,000
1921–23	1,370,000

*An amount not exceeding £1,500 per annum and a loan of £2,000.
†$3,000 appropriated to the Trustees "out of monies they owe the state."
‡$1,000 a year for ten years, the appropriation failing after $4,500 has been paid.

Besides the three institutions mentioned above there have been other colleges and universities which have, now and then, received appropriations from the Legislature, but not to the same extent as these two semi-public institutions. The colleges that have been

favored in recent years are Duquesne University at Pittsburgh, Temple University at Philadelphia, and Washington and Jefferson College at Washington, Pennsylvania. The amounts that have been appropriated to all of these institutions since 1909 are given in Table 51.

TABLE 51.

APPROPRIATIONS IN THE STATE OF PENNSYLVANIA TO HIGHER EDUCATION.*

Institutions	1909	1911	1913	1915	1917	1919	1921
State College...	$482,510	$805,000	$1,220,000	$900,000	$1,275,000	$1,786,462	$2,632,000
University of Pennsylvania...	230,000	795,000	820,000	750,000	800,000	1,000,000	1,105,000
University of Pittsburgh.....	325,000	275,000	400,000	600,000	675,000	750,000	900,000
Duquesne.....	.....	.....	.....	.....	15,000	50,000	50,000
Temple University.....	.....	125,000	100,000	125,000	170,000	200,000	270,000
Washington and Jefferson...	.....	.....	.....	.....	.....	.....	15,000
Total.....	1,037,510	2,000,000	2,540,000	2,375,000	2,935,000	3,786,462	4,972,000

* Appropriation Acts, 1909; 1911; 1913; 1915; 1917; 1919; 1921.

Considerations Involved in the Determination of a State Policy Relative to Higher Education.

To what extent the state of Pennsylvania should go in modifying its century-old policy in regard to education in the light of recent developments is a matter for mature reflection. Whether a Commonwealth should build, equip and conduct institutions of higher learning depends in the final analysis upon the views held by its people as to the objects of government. Apparently in Pennsylvania, so far as higher education is concerned, the practice has been to narrow the field of the government's activity and to leave as much as possible in private hands. It has not proceeded on the theory that the state may undertake whatever is convenient and thus parallel private enterprise, but rather on the principle that the state should act only when the objects of society could not be accomplished without the government's participation.

Accepting this point of view as to the proper functions of a state in regard to higher education as legitimate, the question remains whether the state has in the application of its theory gone as far as it should in order to realize the true objects of higher education in an American Commonwealth. There are two sets

of conditions, the existence of which should require any state that has followed the course pursued by Pennsylvania, to extend its support and control of higher education within its boundaries: (1) If private efforts do not provide a sufficient number of institutions properly manned and equipped to promote its social life through research and the preparation of leaders and workers, the state should undertake to meet the deficiencies; (2) If private schools, although sufficient in number, adequately manned and equipped to meet society's need, should not make it possible for every capable individual to have equal opportunity with every other individual of receiving a higher education.

Totally aside from what has been referred to as the apparent theory upon which Pennsylvania has proceeded, it can be rightfully maintained that it is the duty of every state to establish, maintain and support institutions of higher learning. There are benefits derived from such institutions which private institutions could not ordinarily furnish, such as free tuition and a more direct recognition of important needs of the various groups of its citizens. These benefits are of sufficient importance to establish it as a principle of action that all states should provide such institutions for the benefit of their inhabitants.

No state can long maintain a happy and prosperous civilization without higher educational institutions, among which there must be one or more which is specially devoted to research as well as to the preparation of students in each of the various divisions of learning that are of greater value to the state.

The Situation with Regard to Higher Education in Pennsylvania.

As was indicated above, there are two different points of view from which the higher educational institutions in Pennsylvania and the state's relation to them should be viewed: first, the number of higher educational institutions, both semi-public and private, and the adequacy of their equipment and personnel to meet the needs of the various phases of the social life; second, the opportunity given the youth of the state through the existing institutions to obtain that education which they should have with equal opportunity to all.

The universities and colleges of the state, together with the number of regular students attending each (excluding summer session and Extension students) in the year 1919-20, are given in Table 51-A. These institutions are rendering a service to the state which is of the greatest value. Practically all of them are efficient and a number are of the highest grade. Among them all the University of Pennsylvania has for more than a century stood out as the most prominent; its contribution has in fact been national, and in certain fields, even world-wide in scope.

TABLE 51 A.

STUDENTS IN PENNSYLVANIA UNIVERSITIES AND COLLEGES 1919-1920.*

(Regular students only, excluding Summer Session and Extension students.)

LOCATION	UNIVERSITIES AND COLLEGES	STUDENTS	
		Men	Women
Allentown	Cedar Crest College	0	122
Allentown	Muhlenberg College	389	0
Annville	Lebanon Valley College	159	124
Beatty	St. Vincent College	536	0
Beaver	Beaver College	0	132
Beaver Falls	Geneva College	170	263
Bethlehem	Lehigh University	1,136	0
Bethlehem	Moravian College and Theological Seminary	73	0
Bryn Mawr	Bryn Mawr College	0	464
Carlisle	Dickinson College	431	133
Chambersburg	Wilson College	0	337
Chester	Crozer Theological Seminary	63	0
Collegeville	Ursinus College	123	99
Easton	Lafayette College	725	0
Gettysburg	Pennsylvania College	453	40
Gettysburg	Theological Seminary	38	0
Greensburg	Seton Hill College for Women	0	286
Greenville	Thiel College	110	125
Grove City	Grove City College	248	216
Haverford	Haverford College	207	5
Huntingdon	Juniata College	182	262
Lancaster	Franklin and Marshall College	318	0
Lewisburg	Bucknell University	546	307
Lincoln University	Lincoln University	180	0
Meadville	Allegheny College	336	200
Meadville	Meadville Theological School	14	3
Mechanicsburg	Irving Female College	0	129
Myerstown	Albright College	109	72
New Wilmington	Westminster College	112	127
Philadelphia	Drexel Institute	197	221
Philadelphia	Dropsie College	30	2
Philadelphia	Jefferson Medical College	522	0
Philadelphia	LaSalle College	300	0
Philadelphia	Lutheran Theological Seminary	84	0
Philadelphia	St. Charles Seminary	280	0
Philadelphia	St. Joseph's College	453	0
Philadelphia	Temple University	3,807	2,683
Philadelphia	University of Pennsylvania	5,693	1,169
Philadelphia	Women's Medical College of Pennsylvania	0	103
Pittsburgh	Carnegie Institute of Technology	2,118	627
Pittsburgh	Pennsylvania College for Women	0	191
Pittsburgh	University of Pittsburgh	3,483	1,496
Pittsburgh	Western Theological Seminary	42	6
Selinsgrove	Susquehanna University	212	163
State College	Pennsylvania State College	2,991	303
Swarthmore	Swarthmore College	350	258
Villanova	Villanova College	530	1
Washington	Washington and Jefferson College	368	0

* Data furnished by U. S. Bureau of Education.

It has been impossible in the brief time allowed to make a careful study of the various questions involved in the field of higher education. They are believed to be of such importance that it is recommended that a special commission be appointed by some authoritative body for the purpose of making a careful and detailed analysis of the situation from both of these points of view. There are, however, certain significant facts which lie somewhat closely upon the surface and which have an important bearing upon the present problem of higher education in the state, and these will be presented together with such inferences as seem to be warranted by them.

Practices of Other States.

Every state in the Union has its higher educational institutions and all but a few of the smaller have either a public or a private university. Many of these institutions are private and have an enrollment of but a few hundred and an endowment of a half million dollars or less. While there are in most states one or more strong, well equipped and well manned private colleges, yet there are but a few states in which there are strong private universities. These latter institutions have, however, held the leadership in this field throughout our entire history; some of them are now so well endowed that their income from endowment reaches about a million dollars a year. In the distribution of higher educational institutions Pennsylvania belongs to a small group of northern Atlantic states in that it has a large number of private institutions, both large and small, but no purely state institutions. It is most like New Jersey, New York, Massachusetts and Vermont, all of which have heretofore granted some state appropriations to private institutions from time to time but more frequently for the Department of Agriculture connected with a private institution such as Rutgers, Cornell and the University of Vermont. Most of the other states of the Union have a large State University or a State University and a College of Agriculture and Mechanic Arts as the leading institution of higher education in the state.

The reason for the differences in these two groups is that private institutions in the eastern states were sufficient in number and strength to meet the demand for higher education, while in the western and southern states it seemed impossible for private

interests to perform the same service, and so perforce of circumstances, each of the western states in the earliest years of their history started through public effort that which private effort seemingly could not accomplish. The time has now come, however in these eastern states in which private effort seems no longer to satisfy. The state of Massachusetts has today a commission trying to answer the question whether a public State University should be established in its midst.

Situation in Pennsylvania.

In Pennsylvania the situation has developed somewhat in this way. The two institutions situated in the eastern and western parts of the state, which have been long regarded as being, in a sense, state institutions, felt the pressure for the establishment of additional professional schools and for the enlargement of those colleges already in existence. They also felt the need for increased equipment because of the development of higher education in both the old subjects and the new. They were also compelled to provide much larger teaching staffs in order to take care of the increased enrollment. All of these factors, combined with the fact that the private sources of support were not able to meet the increase of these demands, forced these institutions to turn back to the state for needed assistance in the year 1907, since which time they have regularly received appropriations from the Legislature. It is believed by many of the friends of both these institutions that they cannot continue to render their full service to the state aspirant institutions, and that the state should incorporate them in a broad scheme of public higher education.

Pennsylvania has maintained a Land Grant College or a College of Agriculture and Mechanic Arts at State College, not connected with any other institution, which at the same time offered courses in Liberal Arts as has been the case at Rutgers, Cornell and University of Vermont. The Pennsylvania State College has experienced the same demand for increasing the scope of its activities and for making more extensive and more adequate provision in faculty and equipment for the courses already in existence. This institution now asks that the scope of its activities be enlarged, and that its appropriation be considerably increased.

In the determination of Pennsylvania's policy in such a situation the following facts are pertinent:

(1) **Pennsylvania Requirements.**—The experience of other states indicates that Pennsylvania should have in addition to the private higher institutions three institutions of higher learning capable of producing leaders in society and of contributing through research to the continual advancement of the various fields of social activity. This conclusion may be drawn from the facts shown in Table 52, which contains the number of persons and the number of high school graduates for each such institution in the various states. Most of the institutions represented in this table involve financial investments of many hundred of thousands of dollars, student bodies of several thousands and faculties of several hundreds. There is a question whether some of them are not already too large for the most successful administration. While mere numbers taken in this way are not reliable measures of what should be the size of educational institutions, nevertheless they give the answer based upon the present practice. They show that three public institutions of higher learning are required to be adequate to meet the social needs of a population as large as Pennsylvania's.

(2) **Location.**—Another important consideration is that of the location of the institutions. Many departments of a university must be located in close proximity to the fields of study included in its curriculum. There are, undoubtedly, advantages peculiar to each of the three locations which should be utilized where each of the three state-supported schools is found, and there is undoubtedly need for institutions suited to the development of the various activities found in each location. It would seem, therefore, that it would be wise to distribute the support and physical facilities for higher education in the state of Pennsylvania among these three schools in such a way as to contribute to the best interests of the state as a whole and to the development of the highest efficiency in each institution.

TABLE 52.

Population, Number of High School Graduates and Their Distribution Among Higher State Educational Institutions in the Various States of the United States, 1920.

STATE	Population*	Higher educational institutions†	Population per institution	Number of high school graduates‡	High school graduates per institution
Alabama	2,348,174	3	782,725	2,052	684
Arizona	334,162	1	334,162	570	570
Arkansas	1,752,204	1	1,752,204	1,776	1,776
California	3,426,861	1	3,426,861	10,620	10,620
Colorado	939,629	3	313,209	2,774	925
Connecticut	1,380,631	1	1,380,631	3,595	3,595
Delware	223,003	1	223,003	292	292
Florida	968,470	1	968,470	928	928
Georgia	2,895,832	4	723,958	2,497	624
Idaho	431,866	2	215,933	1,219	609
Illinois	6,485,280	2	3,242,640	16,378	8,189
Indiana	2,930,000	2	1,465,000	9,710	4,855
Iowa	2,404,021	2	1,202,021	10,529	5,264
Kansas	1,769,257	2	884,628	7,060	3,530
Kentucky	2,416,630	1	2,416,630	2,531	2,531
Louisiana	1,798,509	1	1,798,509	1,748	1,748
Maine	768,014	1	768,014	2,899	2,899
Maryland	1,449,661	1	1,449,661	1,936	1,936
Massachusetts	3,852,356	3	1,284,115	11,748	3,916
Michigan	3,668,412	3	1,222,471	9,583	3,194
Minnesota	2,387,125	1	2,387,125	7,423	7,423
Mississippi	1,790,618	3	596,873	1,855	918
Missouri	3,404,055	1	3,404,055	8,150	8,150
Montana	548,889	3	182,626	1,560	520
Nebraska	1,296,372	1	1,296,372	5,117	5,117
Nevada	77,407	1	77,407	227	227
New Hampshire	443,083	1	443,083	1,257	1,257
New Jersey	3,155,900	1	3,155,900	6,293	6,293
New Mexico	360,350	3	120,116	455	152
New York	10,385,227	3	3,125,076	16,043	5,348
North Carolina	2,559,123	2	1,279,561	2,741	1,370
North Dakota	646,872	2	323,436	1,863	931
Ohio	5,759,394	3	1,919,798	16,607	5,536
Oklahoma	2,028,283	3	676,094	4,733	1,578
Oregon	783,389	2	391,694	3,200	1,600
Pennsylvania	8,720,017	3	8,720,017	18,109	6,036
Rhode Island	604,397	1	664,397	1,093	1,093
South Carolina	1,683,724	4	420,931	1,254	313
South Dakota	636,547	3	212,182	1,750	583
Tennessee	2,337,885	1	2,337,885	2,104	2,104
Texas	4,663,228	3	1,554,409	9,073	3,024
Utah	449,396	2	224,698	1,083	541
Vermont	352,428	1	352,428	1,269	1,269
Virginia	2,309,187	5	461,837	2,760	552
Washington	1,356,621	2	678,311	5,159	2,579
West Virginia	1,463,701	1	1,463,701	2,347	2,347
Wisconsin	2,632,067	1	2,632,067	5,654	5,654
Wyoming	194,402	1	194,402	428	428

*U. S. Bureau Census Report, 1920.
†U. S. Bulletin, 1920, Statistics of State Universities and State Colleges.
‡U. S. Bureau of Education—unprinted report.

(3) **Income of the Three Pennsylvania Institutions.**—An analysis of the income of the three semi-public institutions in question is presented in Table 53 (page 151). It has been impossible to get data that can be compared with any high degree of reliability, so these figures must be taken merely as showing general tendencies. Two sets of figures are given in the percent columns; those on the first line are based on the total

income, while those on the second line exclude income from sales and service and from miscellaneous sources, neither of which is strictly educational in type. Taking either set of figures it will be noted that the largest percents of income at both universities are from student fees and that they exceed 50 percent, the usual standard which has been set as marking the percentage of income that should come from such a source in strictly private institutions.

The student fees of Pennsylvania State College constitute from one-fourth to one-fifth of the total income. The position of these institutions is exactly reversed in the case of income from public source. In the case of Pennsylvania State College it rises to between 70 and 75 percent, while at the University of Pittsburgh and the University of Pennsylvania it falls close to one-third and one-sixth, respectively. The amount received from private gifts is the smallest at Pennsylvania State College, the highest at the University of Pittsburgh, while in the case of income from investments and other interests the University of Pennsylvania has the largest proportion and Pennsylvania State College again the least.

Perhaps the most significant thing about this table is the large proportion of income at the two universities that comes from tuition fees. The standard of 50 percent as the proper amount of income from student fees in private colleges presumes, of course, that income from endowments and from gifts make up the other half. In the case of these two institutions, it has been necessary for the state to make the contributions that the supporters of private higher institutions would be expected to finance. The fact that the state does perform this function as it has done regularly since 1907, shows clearly that these institutions are dependent for their existence upon the state for their support, or in other words that private effort has not been successful in providing a sufficient number of institutions adequately equipped and manned to meet the needs of the state.

TABLE 53.

Income for 1921-22—Amounts and Percentages of Total Receipts of Three Institutions From Various Sources.

INSTITUTIONS	Student fees		U. S. Government		State		Gifts for maintenance of instruction		Income from investment and other interest		Income from sales and service		Miscellaneous	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
University of Pennsylvania	$1,800,874.94	56.9 69	None	....	*$452,958.00	13.9 17	$100,413.16	3.2 4	$235,841.32	7.4 10	None	....	$570,988.77	18.6
University of Pittsburgh	733,628.92	54.5 57	None	....	430,228.92	32.0 33	96,018.28	7.1 7	36,144.72	2.7 3	‡$46,544.89	3.5	3,301.54	0.2
Pennsylvania State College	†475,282.43	20.5 24	398,319.27	17.2 20.2	1,089,728.91	47.1 55	12,483.37	0.6 0.7	331.59	0.1 0.1	328,959.44	14.2	7,580.70	0.3

*Including $29,873.62 from the State Board of Education for vocational training.
†Including amounts received for room and board.
‡Not including book store and cafeteria.
No gifts for increase in endowment reported by these institutions for 1921-22.
Total incomes for above institutions exclusive of amounts designated in foot-notes and loans receivable.

(4) **Finances of Higher Educational Institutions in Pennsylvania.**—It has been found impossible to procure satisfactory comparable data regarding the finances of higher educational institutions in the United States. The only central agency gathering such data is the United States Bureau of Education. The blanks sent out by this Bureau are filled in by officers of the institutions who in the absence of positive construction interpret them differently. Furthermore, the Bureau does not discriminate between the income from educational and non-educational departments. Those universities having hospitals, institutions, museums, etc., would, of course, send in different figures according to whether they interpret the blank to mean that they should or that they should not be included. It has been found impossible, therefore, to use these data.

Statistics relative to the expenditures of universities are not gathered by any central agency, doubtless due to the fact that it is much more difficult to get comparable data in this field than in that of income. This is due to the fact that universities are organized so differently, expenditures of a department in one institution is in one school and another institution is in another school. Furthermore, there is no agreement among universities as to the best way to take care of overhead or expenses of the plant. They also disagree among themselves as to the unit of cost that should be adopted.

Notwithstanding all of these objections and uncertainties we venture to offer (Tables 54, 55 and 56) certain statistics relative to the cost per student enrolled in each school in the three Pennsylvania institutions and in the three prominent state universities whose population taken together was approximately the same in 1920 as that of Pennsylvania. While every care within our power has been taken to show the difference in the ways in which these figures were arrived at, nevertheless they should not be taken as satisfactory from a standpoint of either accuracy or reliability. The tables were prepared by Paul A. Mertz, Professor of Education, Ursinus College, and graduate student of the School of Education, University of Pennsylvania.

The justification for the use of the figures here is to show that the cost of education in the Pennsylvania institutions is

TABLE 54.

Estimated per Pupil Instructional Costs in the Schools of Three Pennsylvania Universities Receiving State Appropriations.

SCHOOL OR DEPARTMENT	University of Pennsylvania		University of Pittsburgh		Pennsylvania State College	
	1920–21	1921–22	1920–21	1921–22	1920–21	1921–22
College of Liberal Arts	$ 348.50	$ 341.90	‡	$192.53 – 174.58	$393.33	$289.71
School of Education	323.89	236.09	‡	134.23	.....	.....
School of Engineering	507.25	562.05	‡	407.14 – 374.60	200.54	191.41
School of Mines	.....	.....	.....	..... 325.50	295.61	289.32
School of Commerce and Economics	217.18*	172.42	‡	165.12	.....	.....
School of Law	417.10	333.19	$178.31	181.92	.....	.....
School of Natural Science	.....	.....	.....	....	359.82	402.32
School of Medicine	437.87	507.02**	968.09	724.62	.....	.....
School of Agriculture	.....	.....	.....	....	565.74	557.07
School of Veterinary Medicine	2,532.42	1,548.59	.....	....	.....	.....
School of Home Economics	.....	.....	.....	....	306.08	265.15
School of Fine Arts	433.44	435.31	.....	....	.....	.....
FINE ARTS	.....	494.50	.....	....	.....	.....
MUSIC	148.96	164.23	.....	....	.....	.....
ARCHITECTURE	462.98	465.34	.....	....	.....	.....
School of Dentistry	†	.....	244.02	204.63	.....	.....
Graduate School	94.35	81.64	.....	....	.....	.....

School of Engineering data for University of Pennsylvania includes all Towne Scientific School; therefore Chemistry as well as Engineering.

*1920–21 costs include extensive repairs to Logan Hall, charged to the Wharton School of Commerce and Finance.

**Undergraduate School, not including Medico-Chirurgical College, etc.

DOUBLE COLUMNS under University of Pittsburgh are an attempt to make the data of that institution COMPARABLE with the data of Pennsylvania and Pennsylvania State. The left-hand column is fairly comparable with University of Pennsylvania; the right hand column with Pennsylvania State. Where one set of facts is given, it is because there is no school of that type in one of the two institutions. University of Pennsylvania increase in costs of Medical School per student in 1921–22 over previous years due to added costs of instruction, greater inter-departmental charge, higher current expense, greater expense for equipment (deducted from other costs) and higher University overhead.

† University of Pennsylvania Dental School on private foundation; costs not available in University accounts.

‡ Registration data for these schools include extension students, which available data do not separate.

TABLE 55.

Comparison of Estimated Per Pupil Instructional Costs in the Schools of Three State Universities and Three Pennsylvania Institutions Receiving Public Funds.

SCHOOL OR DEPARTMENT	University of Minnesota 1920–21	University of Michigan 1920–21	University of Wisconsin 1919–20	University of Pennsylvania 1920–21	University of Pittsburgh 1920–21 except 1st 5 1921–22	Pennsylvania State College 1920–21
College of Liberal Arts	$127.77	$189.88	$195.45	$348.50	$192.53	$393.33
School of Education	194.08	.....	163.63	323.89	134.23	.....
School of Engineering	191.90	*237.05	216.18	507.25	407.14	200.54
School of Mines	258.27	.....	.....	.....	‡325.50	295.61
School of Commerce or Economics	616.25	.....	.....	†172.42	165.12	.....
School of Law	170.26	267.29	264.41	417.10	178.31	.....
School of Natural Science	765.23	.....	.....	.....	.....	359.82
School of Medicine	574.44	545.51	973.90	437.87	968.09	.....
School of Agriculture	733.10	.....	908.79	.....	.....	565.74
School of Veterinary Medicine	.....	.....	.....	2,532.42	.....	.....
School of Home Economics	.....	.....	.....	.....	.....	306.08
School of Fine Arts	.....	.....	.....	433.44	.....	.....
School of Music	.....	.....	289.54	148.96	.....	.....
School of Dentistry	312.12	191.46	.....	.....	244.02	.....
Graduate School	.....	29.43	.....	94.35	.....	.....
School of Pharmacy	228.31	106.74	.....	.....	.....	.....

All figures are exclusive of Summer School, Extension, Correspondence, Auditors, Short Courses.

*School of Engineering and Architecture.

†1921-22 figure used since 1920–21 figure includes large item of cost for reconstructing building.

University of Minnesota instructional costs include all costs except light, heat, janitorial service, general or departmental administration costs, new equipment.

University of Michigan costs exclude light, heat, janitorial service, general administration, new equipment. Departmental administration costs are included.

University of Wisconsin costs *exclude* general university costs, new equipment, but include departmental apportionment of expense for light, heat, janitorial service, and departmental administration.

‡Comparable with PENNSYLVANIA STATE COLLEGE.

University of Wisconsin and University of Pittsburgh Medical Schools cost high because of small enrollments.

University of Pennsylvania Veterinary also.

University of Pennsylvania instructional costs include light, heat, janitorial service, departmental administration, but exclude new equipment and university administration.

University of Pittsburgh costs include light, heat, janitorial service, rentals, departmental administration and EXTENSION costs, but exclude new equipment. general administration.

Pennsylvania State College costs are net, they do not include light, heat, maintenance, extension, new equipment. They apparently do include departmental administration.

TABLE 56.

Number of Students Registered in the Schools of the Universities Compared.

SCHOOL OR DEPARTMENT	University of Minnesota	University of Michigan	University of Wisconsin	University of Pennsylvania	University of Pennsylvania	University of Pittsburgh	University of Pittsburgh	Pennsylvania State College	Pennsylvania State College
	1920–21	1920–21	1919–20	1920–21	1921–22	1920–21	1921–22	1920–21	1921–22
College of Liberal Arts	3,963	4,883	4,893*	744	839	948‡	1,450§	420	579
School of Education	599	.....	338	496	656	1,232‡	642	.....	.....
School of Engineering	1,084	2,213	1,119	638	588	326‡	228	1,101	1,107
School of Mines	165	.....	.....	.....	.....	172	126	157	158
School of Commerce or Economics	128	.....	.....	2,136	2,560	2,122‡	478	.....	.....
School of Law	264	362	164	188	227	154	167	.....	.....
School of Natural Science	141	.....	.....	.....	.....	.....	.....	319	285
School of Medicine	361#	450	142	433†	436†	157	179	.....	.....
School of Agriculture	757	.....	942	.....	.....	.....	.....	818	854
School of Veterinary Medicine	.....	.....	.....	30	31	.....	.....	.....	.....
School of Home Economics	.....	.....	.....	.....	.....	.....	.....	142	153
School of Fine Arts	.....	.....	.....	202	228	.....	.....	.....	.....
School of Music	.....	.....	138	19£	24£	.....	.....	.....	.....
School of Dentistry	408	455	.....	720	619	510	661	.....	.....
Graduate School	.....	440	.....	628	876	.....	.....	.....	.....
School of Pharmacy	115	101	.....	.....	.....	.....	.....	.....	.....

These figures unless otherwise designated are exclusive of summer school, extension, correspondence, extramural, auditors and short-term students.

*Includes 382 graduate students.

†Undergraduates School of Medicine only.

‡Includes extension students.

§University of Pittsburgh College figures for 1921–22 include for the first time the first and second-year students in Engineering, Mines, Economics and Education; previously registered in their respective schools.

#Does not include 50 interns.

£Included in the 202 and 228 immediately above.

not excessive and thereby to establish the fact that the funds are on the whole being economically expended. Such wide discrepancies as do exist, as in the case of the Veterinary School of the University of Pennsylvania and the Medical School of the University of Pittsburgh, should be referred to the Board whose appointment has been suggested, inasmuch as questions dealing with the distribution of fields of instruction among the various institutions cannot be dealt with in this brief study.

(5) **Equipment and Salaries.**—While exact data cannot be obtained it is evident that all three institutions are lacking in equipment as compared with institutions of like grade in the United States at large. They occupy a like position as regards salaries paid professors. Since these are the two most essential factors in the success of higher educational institutions it is important to the interest of the people of the state that something be done to make better provision for the higher education of their children and also in order to enable them to have the benefits of the best advice and assistance in carrying on their various enterprises.

(6) **Income From Endowments and Appropriations.**—In this connection it is pertinent to point out that one of the most significant movements in recent years is the gradual rise of certain of the large state universities into positions of commanding leadership. Michigan, Illinois and California are possibly the most noted examples. There are but few private institutions that can long remain in the same class with them, because of the large endowments that will be required to match the appropriations received from the state, and the income from endowments which have been subscribed by private individuals, in these state institutions. A private university requires today an endowment of close to fifty million dollars in order to have a financial basis equivalent to the leading state universities. Table 54 (page 153) shows the income for current expenses from appropriations and from endowments in the leading universities and colleges of Agriculture and Mechanic Arts of the country, including the three Pennsylvania institutions. It should be noted that the

figures of the latter group include the figures for hospitals and other non-educational activities.

(7) **Limited Accommodations.**—Another significant fact is the inability of the higher educational institutions in this state to accommodate the number that apply, each of the three institutions named having been compelled to deny admission in the fall of 1922 to a number of students.

Inquiry was made to each of these three institutions as to the numbers that failed of admission because of lack of accommodations to take care of them. The number reported by the University of Pennsylvania for the year 1922 was 591, distributed as follows: 184 College of Liberal Arts (Pre-Medical and Pre-Dental), 69 School of Education, 338 Wharton School. The Pennsylvania State College reported 478, distributed as follows: 300 Engineering, 229 Liberal Arts, 84 Natural Science, 65 Department of Home Economics. These distribution figures include 200 who did not send in their application blanks "presumably because they believed there was little chance of admission." The University of Pittsburgh reported 265, distributed as follows: 150 School of Pharmacy, 100 School of Dentistry, 15 School of Medicine. These figures do not include those who were rejected for any reason other than for the lack of physical accommodations. The number not admitted for other reasons in the University of Pennsylvania was 1,327, in the Pennsylvania State College (as stated) 200; no figures upon this point have been obtained from the University of Pittsburgh.

(8) **Free Scholarships.**—At each of the three institutions there are scholarships available, some of which are granted without regard to competitive qualifications, while others are dependent upon school records and the need for aid because of limited economic conditions. The so-called senatorial scholarships belong to the first class; these are granted upon recommendations of members of the State Senate. In the University of Pennsylvania there are during this year 319 such scholarships, in the University of Pittsburgh 171, and at the Pennsylvania State College 157. The total number of scholarships other than senatorial are as follows: University of Pennsyl-

vania 481, the University of Pittsburgh 216, and the Pennsylvania State College 64.

It will be observed from these data that only a very small number of High School graduates in Pennsylvania have the opportunity of obtaining free tuition in a higher educational institution in the state. The fact that most of the scholarships are competitive in nature still further limits the opportunity of those young people who do not possess the highest academic qualifications. Unfortunately such persons can be admitted only upon the recommendations of members of the Legislature. Inasmuch as the number of scholarships available to each senator is limited, it is thus seen that opportunities are far from equal for the boys and girls of this state to receive the benefits of a higher education.

These two different sorts of limitations placed upon the obtaining of free tuition in higher educational institutions of the state limiting registration to "possession of brains" or "pull" make it very important that the state provide means whereby all who desire may obtain the benefits of a higher education at the lowest possible cost.

The appropriation of $56,000 made by the Legislature of 1921 to pay the tuition for students in the colleges of the state, which have been obtained under competitive examinations, have doubtless worked to the benefit of a large number who would not otherwise have been able to attend college. The actual workings of the plan and its bearings upon the question in hand it is impossible for us to state, however, we believe it to be creditable and recommend its continuance. It will probably serve the purposes of the state much better if it were limited to those who otherwise could not obtain the benefits of a college education.

(9) **Control of Boards of Trustees.**—While the Board of Trustees of each of these three institutions is legally an agent of the Commonwealth in the expenditure of the state funds, the extent of the control which it has through these boards varies considerably by reason of the differences in the manner in which they are chosen. The considerable variety in the agencies that choose the members of the Board of Trustees at Pennsylvania State College, and also the brief terms for

which they are chosen, would naturally promote a truer recognition of the needs of the state in the deliberations of these boards than that which would characterize the action of the Boards of Trustees at the two universities, which boards serve for life and chose their own successors, subject only to the limitation that the alumni have given the right to nominate in a certain percentage of the vacancies.

Conclusions.

Summing up what has been said thus far the situation which confronts the state at the present time may be set forth as follows:

The state needs at least three finely equipped and efficiently conducted institutions of higher learning in order to place itself on an equal footing with other states in the field of higher education, and the plan which has been followed for the past century or more of depending upon private institutions seems now to be at the breaking point. This is true both from the point of view of the need for a sufficient number of institutions and also in order to give all of its youths greater equality of opportunity to receive the benefit of a higher education. It is, therefore, incumbent upon the state to find ways in which such institutions may be secured, either (1) by gradually increased appropriations to the Boards of Trustees of these institutions under such an arrangement with these Boards as will insure that the appropriations will be spent in such a way as will satisfy most efficiently the needs of the state; (2) by making suitable arrangements with the Boards of Trustees of other private institutions for the accomplishment of the same purpose; or (3) by the establishment of new institutions entirely under state support and control.

Viewed in the light of the history of Pennsylvania and of the intimate relationship that exists between the three semi-public institutions and the people of the state, it would seem that the natural solution would be for the state to base the far-reaching system of higher education which it should possess in the future upon that furnished by these three historic institutions—the University of Pennsylvania, the Western University of Pennsylvania (University of Pittsburgh), and the Pennsylvania State College.

Possibilities of the Realization of These Conclusions.

Certain practical features of the situation now existing in each of these three institutions from the point of view of the realization of these conclusions should now be considered.

Since Pennsylvania State College has been dependent to so large a degree upon the appropriations of the Legislature, and since its trustees have been chosen through more popular agencies than those of the other two institutions, it would seem that the state would have little or no difficulty in formulating such a policy for the administration of this institution to secure through its management the realization of those conditions which would meet the needs of the state. This is made clear in the following statement made by a member of the Board of Trustees:

"Since the Pennsylvania State College has been maintained and supported out of the public funds, and since it as a corporation formally recognizes that it is the corporate agent of the state, with the legal title to the plant in the corporation and the equitable title thereof vested in the Commonwealth, and further recognizes that it as a corporation is subject to the direction of the Commonwealth, it appears the Commonwealth may formulate any new policy of administration it may desire."

The problem is a more difficult one when it comes to the consideration of the two universities. The University of Pennsylvania has in years gone by ranked and still does rank among the highest of the universities of the country. For a number of years, however, fears have arisen that it could not maintain that position because of increasing amounts of endowments and of other sources of income that have come to those institutions in other states that were its equal. The state has rendered a fine service not only to the university but to the state itself in the past fifteen years in enabling it to meet the emergencies growing out of its increasing deficits. It seems now that the University of Pennsylvania must, in order to maintain the highest plane of efficiency, find still additional sources of income or obtain larger appropriations or limit the scope of its activities. It would be very unfortunate not only for the institution but for the state if the latter contingency resulted. It remains to be seen whether private funds will be

provided in sufficient amounts to enable the university to maintain the position in the education of the nation that rightfully belongs to it.

Efforts in this direction have already been started. Unless the endowment can be increased by thirty or forty millions of dollars and the plant and equipment considerably improved, it would be to the best interests of the state and the nation for the Board of Trustees of the University to enter into such an arrangement with the state as would secure, on the one hand, the needed increases in plant, equipment and income comparable in amount with the great services it is capable of rendering, and on the other hand guarantee to the state that the money so given will be spent in those ways which will most contribute to the advancement of the welfare of the state.

The University could then play its part in maintaining the state of Pennsylvania and the city of Philadelphia in the high position they have always taken in national affairs. If, however, an arrangement satisfactory both to the University and to the state could not be worked out, it would seem incumbent upon the state to follow the course of one of the other alternatives mentioned above; viz., the development of some other private institutions in the eastern part of the state with which satisfactory arrangements could be made, or to establish an entirely new institution and then conduct it in such a way as would realize the ideals that a system of state higher education should accomplish.

The University of Pittsburgh should render a service to western Pennsylvania similar to that of the University of Pennsylvania in the eastern part of the state. That which has been said regarding the best policy for the University of Pennsylvania applies on the whole to the University of Pittsburgh as well. It is just as important to the state to have an institution in Pittsburgh or in its vicinity which will render the service that a higher educational institution should render, as it is to have an institution of the same kind in the vicinity of Philadelphia.

Inasmuch as the question as to the sufficiency of private means cannot be solved in another year or two in the case of both institutions, and inasmuch as it would take a number of years for another institution should render, as it is to have an institution of the same reason that it may prove best in the end to make some combination

of public and private support, such as exists at Cornell University, it is desirable to indicate a course of action for the present which will be adapted to either of these three contingencies.

A Board of State Control of Higher Education in Institutions Receiving State Aid.

It would seem that the future further appropriations to the University of Pennsylvania and the University of Pittsburgh might well be subject to a greater degree of state control, not that there has been any waste or lack of conscientious desire to promote the best interests of the state, but in order that the principle of state control of state appropriations may be realized and also in order to insure that the Trustees of the Universities in the making of their plans give such recognition to the needs of the state that the fullest possible return will come back to it for the money expended.

At the present time appropriations to the various departments of these institutions are made by their respective Boards of Trustees. As a matter of fact they are applied to meet the deficit, as it is called—meaning by this term the difference between the expenses of running the institution and the income from all of its departments. This means that the needs of the universities as now organized and conducted are given the first consideration. There would be nothing wrong with this provided the trustees took care constantly to abolish or limit those departments in the universities that seemed to render little service to the state, and establish new departments to meet new developments in the social life of the state.

It is at this point that the practice which has so long prevailed, of making private boards the agent of the state for the expenditure of its funds, fails to make certain that the best interests of the state are secured. That which has just been said does not apply, of course, to those special appropriations made by the Legislature for particular departments. In the University of Pennsylvania at the present time for example they cover the School of Education and the Extension courses. These special appropriations are to be approved inasmuch as they insure the use of money for those purposes which the state believes to be capable of rendering direct services. It is quite reasonable to expect, however, that the con-

trol by a public board created for that purpose by the State Legislature could better care for the interest of the state than the Legislature itself.

There are other advantages of a public board for higher education. If such a board were to have certain responsibilities connected with the appropriations of all three of the institutions they could doubtless make such an adjustment between the work of all of them as to avoid useless duplication of effort and to check any tendency which might appear to support departments which were not fully efficient or which did not seem capable of rendering as much service to the state. It is very probable, too, that such a board could also, through its recommendations to the Legislature, or through influence with the Boards of Trustees, foster the development of those departments in said institutions which can be carried on most successfully therein, and curtail or abolish altogether those departments where the conditions do not seem favorable for their continuance.

Such a board would also be of considerable advantage to the institutions themselves inasmuch as the present arrangement of securing appropriations is quite unsatisfactory in this one very important respect. Another matter which the board should have in mind is the unnecessary duplication in Extension service as well as in departments doing work upon the campus. It should give attention not only to unnecessary wastes of funds but also to standards of entrance required to undertake the work, and to the quality of performance required to receive credit for degrees.

The universities hesitate to incur obligation even for departments under special state appropriation which will involve expenditures after the appropriation expires, for fear that it will not be renewed and that in consequence the universities will be unable to meet their obligations without undue strain. Doubtless there are duplications in appropriations, some of which are warranted, others of which are unwarranted. A *State Board* in control of all of this would greatly assist if the control were exercised by a single governmental body. Just what is the best form for this board of control it is difficult to say. This matter should likewise be referred to the proposed *Commission.* In the meantime a temporary board could be appointed by the Governor to serve until such time as this matter is finally determined.

State Board for the Control of Schools of Education in the Three Institutions.

The principle of state control through a public board of the appropriations made to private higher educational institutions may be applied to all such appropriations as recommended above, or in case such a plan does not meet with the favor of the Governor and the Legislature upon the one hand and the institutions themselves upon the other, it may be narrowed to only a portion of such appropriations. Among the fields in which it would seem that the principle could be most easily applied is that of appropriations for Schools of Education, inasmuch as this field renders service to the state, of which there is great need, and in the conduct of which it is much to be desired that all three institutions co-operate in such a way as to produce the greatest benefit to the state as a whole from their individual and collective efforts.

In order to meet the needs of teacher-training and the need for the improvement of the 45,000 teachers in service of this state, three fully developed institutions are none too many. While certain subjects might be taught at all of them, each institution would develop its specialties, the selection of which could be made in accordance with the peculiar situations surrounding each school and the demands made upon it. The division of the work among these schools should be determined by such a board. Graduate Schools of Education should be established in such of these institutions as are adapted for this work.

It is believed, however, that this board should not, now at least, displace altogether the Boards of Trustees of these institutions. While it should have the power to approve or disapprove items in the budget and the rules and regulations for the conduct of the schools as proposed by the School of Education in each institution through their Boards of Trustees, it should seek to exercise its influence by guiding and suggesting rather than by directing and controlling. It is believed that in this way each school would have the best opportunity of exercising initiative and of reaching its fullest efficiency.

It is believed also that this board should be a board existing solely for this purpose and that it should be borne in mind that its

functions may be extended to appropriations for other purposes. This plan will be in accord with the past policy of the state, which in the establishment of other state institutions such as Normal Schools, insane asylums, penitentiaries, etc., has placed local boards in charge. While such a board would not be a local board, yet it would be in charge of a single function, nevertheless a function with such large magnitude as would require considerable time of those persons appointed upon it, possibly all of the time that a busy man could be expected to give to public affairs. Such a board becoming interested in its problems would, with the assistance and co-operation that it could obtain from the Boards of Trustees and the faculties of the three institutions, do more for the development of education in the state and for the higher institutions themselves than a board which had also other types of schools to require their attention.

Such a board should work in the closest co-operation also with the State Department of Education in the realization of its plans. The function of the State Superintendent of Public Instruction should be to co-ordinate the efforts of this board with those boards in control of other portions of the public school system, and to stimulate and encourage the advancement of its work. As will be pointed out in the section of this study dealing with the office of the State Department of Public Instruction there are a number of ways in which the office and the faculties of the Schools of Education should work in the closest harmony. For these reasons the State Superintendent of Public Instruction should serve as the secretary and executive officer of the board.

It is believed that eventually the state will have these centers of higher education working in close harmony. Whether it is a single institution or three separate institutions, whether one or more of these state-supported centers would be in connection with a private institution, there should be a single controlling board co-ordinating the efforts of all three, eliminating wastes of money and of time and of effort upon the parts of teachers and students alike, both on the campus and in Extension work throughout the state. Whatever steps are taken in regard to control should have this in mind as the most probable outcome. A *Commission* on the one hand to study the entire problem intensively during the next two years and a *Board* on the other hand to manage all the state's

efforts in this direction until such time as it seems wise to make a change in it, seems to furnish the best immediate solution of the problem involved.

Appropriations for Higher Educational Institutions.

There is given in Table 57 the combined amounts of appropriations from the states and from the United States to the higher educational institutions in ten of the principal states of the Union including Pennsylvania. In absolute amounts Pennsylvania is the lowest except three, Indiana, Wisconsin and New York,

TABLE 57.

INCOME FOR CURRENT EXPENSES FROM APPROPRIATIONS AND FROM ENDOWMENTS IN THE LEADING UNIVERSITIES AND STATE COLLEGES OF THE COUNTRY.*

INSTITUTIONS AND STATES	Appropriations—State and United States combined	Income from endowments
PRIVATE UNIVERSITIES		
Harvard	.....	$2,021,562
Yale	.....	1,388,296
Columbia	.....	1,563,592
Princeton	.....	369,681
SEMI-PUBLIC UNIVERSITIES		
Cornell	$1,348,636	738,113
University of Pennsylvania	627,706	575,161
STATE UNIVERSITIES		
California		
University of California	2,841,936	368,821
Illinois		
University of Illinois	3,152,576	32,451
Indiana	1,670,863	100,389
Indiana University	715,978	54,661
Purdue University	954,885	45,728
Iowa	3,026,071	58,507
Iowa State College of Agriculture and Mechanical Arts	1,756,488	35,088
University of Iowa	1,269,583	23,419
Michigan	3,431,038	161,056
University of Michigan	2,355,423	90,320
Michigan Agricultural College	998,221	70,736
Michigan College of Mines	77,394	.....
Minnesota		
University of Minnesota	3,140,661	109,883
New York	1,478,516	738,113
New York College of Forestry	129,880	.....
Cornell University	1,348,636	738,113
Ohio	2,663,843	77,047
Ohio University	287,337	5,865
Ohio State University	2,070,833	62,356
Miami University	305,673	8,826
Pennsylvania	2,207,657	636,913
Pennsylvania State College	1,222,114	31,020
University of Pennsylvania	627,706	575,161
University of Pittsburgh	381,510	30,732
Wisconsin		
University of Wisconsin	2,135,424	41,533

*U. S. Bureau of Education Report, 1919–20, in press.

TABLE 58.

PER CAPITA DISTRIBUTION OF STATE AND UNITED STATES APPROPRIATIONS COMBINED GIVEN TO HIGHER EDUCATION, 1920.

Pennsylvania	$ .25
California	.83
Illinois	.49
Indiana	.58
Iowa	1.26
Michigan	.91
Minnesota	1.31
New York	.14
Ohio	.46
Wisconsin	.81

TABLE 59.

PERCENT OF STATE INCOME GIVEN TO HIGHER EDUCATIONAL INSTITUTIONS IN TEN STATES OF THE UNION, 1920.

STATES	Higher educational institutions
Pennsylvania	.0003
California	.0009
Illinois	.0005
Indiana	.0008
Iowa	.0016
Michigan	.0012
Minnesota	.0021
New York	.0002
Ohio	.0005
Wisconsin	.0013

TABLE 60.

AMOUNTS AND PER CAPITA DISTRIBUTION OF STATE APPROPRIATIONS TO HIGHER EDUCATION, 1920.

STATE	Amounts of state* appropriations	Per capita distribution
Pennsylvania	$1,893,231	$ .22
California	2,682,597	.78
Illinois	2,871,500	.44
Indiana	1,438,650	.49
Iowa	2,807,733	1.17
Michigan	3,209,144	.88
Minnesota	2,948,851	1.23
New York	1,532,906	.15
Ohio	2,123,633	.37
Wisconsin	1,926,160	.73

*U. S. Bulletin, 1920, Statistics of State Universities and State Colleges.

which appropriates only for the School of Agriculture at Cornell University, and the School of Forestry at Syracuse University. In seven other states the appropriations are larger. They are given

in ascending order as follows: Ohio, California, Iowa, Minnesota, Illinois, and Michigan.

This is not the best way, however, to make comparisons of appropriations owing to the differences in population and in the wealth of the various states. When the appropriations to these same states are arranged on the basis of per capita of population, it is found, as may be seen in Table 58 (page 167), that Pennsylvania granted in the year 1920 but $0.25 per capita for higher education. Only one state, that of New York, which appropriated only for agriculture and forestry, granted a lower amount than did this state. Minnesota and Iowa both grant almost three times as much. Using one-half the appropriation for the biennium 1921-23 instead of data for the year 1920 it is found that the amount per capita in Pennsylvania is $0.29. This does not change the rank of this state in this particular.

In Table 59 (page 167) is given the percent of the total income of the inhabitants of the various states for the year 1919 that was appropriated for higher education in the year 1920. The rank of the states in this particular is very similar to that in the previous table. It shows that Pennsylvania has made a very small contribution to the support of higher education as compared with other representative states in the Union.

Directing attention now only to institutions of "Agriculture and Mechanic Arts," it may be seen by referring to Table 57 (page 166) that in absolute amounts appropriated by national and state governments for these institutions, Pennsylvania occupies a middle position in the five states given in this list in which there are separate institutions of this character. These institutions in Indiana and Michigan obtain less amounts from such sources, while those in New York and Iowa more than the Pennsylvania State College. The appropriations by the Legislatures separate from those granted by the Congress are given in Table 60 (page 167). The amounts per capita of population are also given in the table.

These data taken together clearly show that the Legislature of the state would be warranted in granting considerable increase to the Pennsylvania State College and to each of the two Universities. While Pennsylvania occupies a more favorable position than other states as regards its appropriations for the Pennsylvania

State College than for the other two institutions, it must be remembered that the state has undertaken a larger proportion of the burden of the support of this institution than it has for either of the other two.

Another matter that must be borne in mind is that practically all of these appropriations in Pennsylvania were for current expenses, while portions of the appropriations in other states were for the erection of buildings and other capital outlays, the exact portion of which it has been impossible to determine. It is undoubtedly true that in order to insure the continuance of the high standing of higher educational institutions in this state large outlays will be required for better equipment and for the increase of the school plants to accommodate a number of the students who desire to attend. It is also just as necessary that increased income be received in order to adequately compensate professors and instructors and to encourage research in these schools.

While the amount of the appropriations for permanent improvements should depend, more than in the case of current expenses, upon the amount of control that the state expects in the future to exercise over the respective institutions, and while the amounts for each of these purposes would naturally depend upon the wisdom of the plans proposed by each of these respective institutions, it seems to be clearly established that the Legislature would be making no mistake in greatly increasing the appropriations to all of them for both classes of expenditures.

CHAPTER V.

Department of Public Instruction.

In Pennsylvania as in many other states of the Union the first Superintendent of Public Instruction was some other officer of the state delegated to gather information and statistics relative to the public schools as they were carried on in the various school districts. When the educational functions were first given to a separate officer, little real responsibility was conferred. His chief duties were to gather statistics and information, generally, relative to the public schools, to advise local school districts as to proper legal procedure, as to good school practice, to create favorable public sentiment and to promote the efficiency of public education through public addresses and in such other ways as opportunity afforded, and to advise the Legislature from time to time as to what was best for the interest of the schools.

As the efficiency of education advanced in the more progressive communities and as higher standards of what constitutes good education were expected by the more intelligent people in all school districts throughout the state, laws were passed by the Legislature which not only required all communities to conduct their schools in accordance with the higher standards but also increased the functions of the State Superintendent of Public Instruction and caused his office to participate in one way or another in the securing of better conditions. The legislation in this state relative to plans for school buildings, certification of teachers and the enforcement of the compulsory education laws are examples. In most states of the Union he is authorized to withhold state funds unless full compliance was made with the laws of the state.

The Department of Public Instruction in Pennsylvania has passed through a similar evolution. In endeavoring to pass judgment upon the wisdom of the appropriation now made to support it the author is compelled to rely upon such evidence as is available in the short time that could be given to the study. The facts are submitted as found together with such inference as it is believed

may fairly be drawn from them. There are, however, certain statements that are not supported by statistical material, but which are based upon many observations of this office with a background of impressions gained in years past from visits made to over twenty other like offices in other states. Taken all in all they represent the author's best judgment as to the State Department of Public Instruction as now conducted in this state in the light of the available facts as herein presented.

The new legislation referred to above and the increasing desire of school districts for the services of well-qualified persons to advise them, together with the great development in vocational education already brought about by the passage of the Smith-Hughes Act started a great increase, beginning about 15 years ago, in the staffs of the State Education Offices throughout the country. The statistics relative to the number of professional officers, clerks and stenographers employed in the State Education Office of Pennsylvania and in the other states of the Union during the past twenty years is not available in such form as to make exact comparison possible. The reports of the State Superintendent of Public Instruction of Pennsylvania for various years during this period show the number of persons employed, as follows:

TABLE 61.

NUMBER OF PROFESSIONAL AND CLERICAL EMPLOYEES IN OFFICE OF THE STATE DEPARTMENT OF PUBLIC INSTRUCTION OF PENNSYLVANIA.*

YEAR	Professional officers	Clerks and stenographers
1901	3	5
1906	3	6
1909	5	6
1912	10	7
1916	15	14
1918	18	15

*Reports of Superintendent of Public Instruction.

The Educational Directory published by the United States Bureau of Education contains the names and positions of those persons whom the State Education Offices in the various states sent in to the Bureau from time to time as constituting the heads of the various departments and their chief assistants in addition to the superintendents and deputies, and it is the only general

source presenting such data for all the states. The data given in these directories have been tabulated in Table 62. It will be noticed that the figures for Pennsylvania in Table 61 (page 171) are larger than those given in Table 62. This shows a tendency, which no doubt was observed in many of the states, not to report to the United States Bureau of Education the names of all persons who might properly be considered as members of the professional staff. The differences for the year 1920-21 between this table and the one to follow also confirm this observation.

TABLE 62.

PROFESSIONAL STAFFS OF STATE DEPARTMENTS.*

STATE DEPARTMENTS	1913	1915–16	1917–18	1919–20	1920–21	1921–22
Pennsylvania	3	9	9	9	28	71
Massachusetts	9	11	17	23	29	31
Connecticut	2	4	4	11	14	13
New Jersey	5	5	5	5	19	20
New York	19	19	17	17	18	19
Maryland	2	5	5	9	9	11
North Carolina	5	6	6	7	16	25
Ohio	7	10	11	15	11	16
Indiana	6	7	7	10	10	12
Illinois	3	4	4	5	6	15
Wisconsin	2	16	19	21	19	21
California	1	5	5	9	14	16

*Based on Educational Directories.

Table 62 indicates that in states other than Pennsylvania, New Jersey and New York there was a tendency to increase State Education Office staffs during this decade, but at the same time the tendency was held in check by the World War.

A natural inference from the figures presented in Table 62 showing a large increase in Pennsylvania's education office in 1920-21 and 1921-22 over previous years would be that this increase was too large. In order to test this out Table 63 (page 173) has been prepared. It happens that for the year 1920 the Bureau of Education published a complete list of all the persons employed in the State Education Offices throughout the country. These persons have been classified into two large divisions—professional and clerical, excluding librarians, laborers and persons employed in all other work which does not ordinarily belong to a State Education Office. In this table there is also given for each state the number of pupils enrolled in the public schools for

TABLE 63.

Staffs of State Departments.*

1920	Pennsylvania	Massachusetts	Connecticut	New Jersey	New York	Maryland	North Carolina	Ohio	Indiana	Illinois	Wisconsin	California
Professional	65	39	54	20	151	9	21	19	9	13	21	17
Clerical	90	75	36	16	184	7	8	8	10	18	9	29
Total	155	114	90	36	335	16	29	27	19	31	30	46
Pupils enrolled for each professional staff officer	24,776	15,939	4,842	29,739	11,389	26,846	31,488	53,719	62,921	86,736	22,154	40,955
Rank	5	3	1	7	2	6	8	9	11	12	4	10

*Based on U. S. Bulletin 46, 1920.

the year 1920, the latest year for which data were available, for each professional staff officer. In the next line are found figures giving the rank of each of these states beginning with the state that has the least number of pupils for each staff officer. These figures show that Pennsylvania, which has one professional staff officer in its state office for every 25,000 pupils, has a larger number of pupils for each such officer than four other states—Connecticut, New York, Massachusetts and Wisconsin—all of which states rank high educationally, and that there are seven states which are not so well supplied with such professional advice. The differences between Pennsylvania and the three states which are next below her—Maryland, New Jersey and North Carolina—are comparatively small, and so on the whole Pennsylvania may be said to lie in the median group. *From this the conclusion is fairly drawn that the number of such professional officers is not too large based upon present practice in other states.*

Salaries Paid Professional Staff.

According to data furnished by the State Superintendent of Public Instruction in October, 1922, there were 72 such staff officers. These were distributed among the various bureaus as shown in Table 64. The salary of the State Superintendent is $12,000 a year, the first deputy $7,500, the second deputy $6,000. The salaries of the directors of the various bureaus range from $5,000 to $6,000, and of their assistants from $2,500 to $5,000. Besides those in the administrative bureaus there are certain specialists most of whom are directors of special school subjects whose salaries range from $4,000 to $7,000. There are also certain persons acting in what might be called field work, of whom there are two classes, the supervisors of Agriculture and of Home Economics, who receive from $1,800 to $3,000 a year, and directors and assistant directors in Extension and Americanization work whose salaries range from $2,500 to $5,000.

TABLE 64.

CLASSIFICATION OF THE "STAFF" OF THE OFFICE OF THE STATE DEPARTMENT OF PUBLIC INSTRUCTION, 1922.

Superintendent	1
Deputy superintendent	2
Assistant superintendent (law)	1
Administration	3
Attendance	5
Health education	7
Rural education	4
Subject directors	14
School buildings	4
Special education	3
Teacher bureau	3
Vocational education	19
Americanization	6
Total	72

TABLE 65.

Average Salaries Paid Professional Employees in State Education Offices 1920-21.*

AVERAGE SALARIES	STATE											
	Pennsylvania	Massachusetts	Connecticut	New Jersey	New York	Maryland	North Carolina	Ohio	Indiana	Illinois	Wisconsin	California
Superintendent....	$12,000	$7,500	$9,000	$10,000	$10,000†	$8,000	$4,000	$4,000	$5,000	$7,500	$5,000	$5,000
Deputy superintendent..	6,750	5,000	.....	5,000	6,000	6,000	.....	2,500	2,400	.....	3,850	3,600
Staff officers.....	3,500	2,340	3,000	2,875	2,570	4,215	2,535	2,580	3,440	3,420	3,435	2,750

*Based on U. S. Bulletin 46, 1920.
†See text—Commission's salary increased to $12,000.

There are two points of view from which the question of the amounts of salaries paid the members of the Department of Public Instruction can be approached. The first is that of salaries paid in other State Education Offices; the second is that of the salaries paid the various members of the staff before entering this service, and the salaries paid certain members who have recently left the state office. The first method, which may be called the comparative method, is as a rule inferior to the intensive method, which inquires into all of the facts in a given situation rather than the one element which is emphasized and brought out in the comparative method. The latest comparative statistics are those published in the Bulletin of the United States Bureau of Education for 1920 giving data for the year 1920-21; this is presented in Table 65 (page 176). According to this table the salaries of the superintendent and the average salary of the deputy superintendents were higher than those of corresponding officers in other states. Since that date, however, salaries in certain other states have been increased while those in Pennsylvania have remained the same. The Commissioner of the State of New York is now receiving $12,000 a year. In the average salaries of professional officers other than those just mentioned, Pennsylvania ranks high but is not the highest. It is one of a group of four states in which the averages are between $3,400 and $3,500.

In order to make a more intensive study of this question, each member of the professional staff was asked to give confidentially his salary and other professional income prior to taking his present position. It was necessary to include professional income by reason of the fact that every member of the State Education Office is prohibited from accepting fees for professional services rendered within the state. Each person was also asked to give such data as he cared to give regarding comparative cost of living in Harrisburg and in his former residence and also the salaries of any other positions which he had been offered since joining the education office staff. Information was also sought regarding the salaries now paid certain former members of the staff who have accepted other positions.

This information cannot, of course, be published because of its confidential nature. It is believed, however, that a careful perusal upon the part of any unprejudiced person would lead to the con-

clusion that the salaries paid those who have recently entered the State Department of Public Instruction were no higher than it was necessary to pay them in order to secure their services. It was the policy of the Superintendent of Public Instruction, in which he was warmly supported by the Governor and by all persons interested in the recent educational movement in this state, to get only men and women of the highest ability for these positions. The evidence presented goes to show that in order to secure persons of superior qualifications it was necessary to pay them the salaries they are now receiving. In this connection it is well to remember that these persons were employed at a time when salaries were advancing, which advance has been sustained, whereas persons in other State Education Offices entered when salaries were lower, and have remained at those salaries, possibly because it is frequently difficult for persons in such positions to obtain positions in a local school system, and also, in many cases in other states, because their salaries are fixed by statute.

A still more important fact to be remembered about these salaries is that all of the staff are compelled to work eleven months in these positions instead of nine or ten months as in the public schools and are not allowed to accept fees for any kind of educational service within the state. In fact a number of them have been compelled to give up contracts for the preparation of books for publication. Another consideration is the fact that costs of living in Harrisburg are greater than in places where some of these persons lived before. While some of the members of the staff had their salaries increased after first entering, as was also true of some of the former members on the staff in the previous administration, it was not fair that they should continue on at the original salaries when persons coming into the office more recently were paid higher salaries for doing the same quality of work, it having been found necessary to raise the scale of salaries in order to get persons of the highest degree of merit.

Another factor which has significance in this connection is that a goodly number of persons refused to accept positions in the State Education Office at salaries as high as those now paid. Eight members of the professional staff have left the Department within the past year or two, all of them either at increased salaries or with opportunities to carry on outside work which would considerably

increase their income. The fact that 12 percent of the persons employed have resigned in order to promote their best interests would clearly indicate that in order to retain those who remain the salaries now paid are necessary. Twenty persons filling clerical or stenographic positions have gone into other departments of the state government at increased salaries, and in order to retain ten others it was necessary to increase their salaries.

All of this evidence taken together seems to warrant the statement that the salaries are no higher than is necessary to secure and hold men and women of the high qualifications that such positions demand in order to promote the highest efficiency in the schools of the state.

Expenses of the Department.

The expenses of the State Department of Public Instruction for the fiscal year ending May 31, 1922, are shown in Table 66 (page 180). These figures have been obtained from the account books kept in the Department and are classified in accordance with the plan used in its accounting system. There are excluded from this table such bureaus as are not ordinarily included in a State Education Office. This is necessary in order to make the amounts comparable with the expenses of similar offices in other states. The bureaus and appropriations that have been excluded are those of Professional Education, Medical Education and Licensure, Dental Council, Midwifery, Blind Babies, Blind Students, Pennsylvania School Journal and Corn Planter Indians. This table omits also the expenses of certain forms of local service conducted through the Bureau of Vocational Education, such as county supervision of Agriculture and Home Economics. The table includes the expenses of carrying on the Philadelphia Survey and of conferences of local school officers held at the Department; the former because it was a service rendered for the most part by those employed in the Department and the latter because the advice obtained was used in the formation of the policies of the Department.

The expenses are apportioned among the various bureaus in order that those who care to do so may compare the expenses with the amount of service rendered by each of the bureaus and also with the number of professional officers employed in each as given in Table 64 (page 175).

TABLE 66.

Annual Expense of Various Bureaus and Divisions of Office of State Superintendent of Public Instruction 1921-22.

OFFICES	SALARIES			Traveling Expense	Grand Total
	Staff	Clerks, Stenographers, Janitors	Total		
Superintendent	$12,000.00	$ 7,387,50	$19,387,50	$7,937.45	$27,324.95
Deputy Supt. 1st	7,500.00	2,524.98	16,024.98	1,022.17	17,047.15
Deputy Supt. 2nd	6,000.00				
Asst. Supt. (Law)	1,975.76	1,437.43	3,413.19	.....	3,413,19
Administration	13,416.42	35,709.95	49,126.37	1,244.67	50,371.04
Attendance	20,499.60	5,899.68	26,399.28	5,105.00	31,504.28
Health Education	27,199.68	2,052.50	29,252.18	6,271.52	35,523.70
Rural Education	20,999.76	2,400.00	23,399.76	3,923.29	27,323.05
Subject Directors	47,707.49	.....	47,707.49	8,112.29	55,819.78
School Buildings	13,999.92	2,400.00	16,399.92	1,358.36	17,758.28
Special Education	11,374.84	1,099.92	12,474.76	1,340.73	13,815.49
Teacher Bureau	13,599.84	16,984.35	30,584.19	1,516.56	32,100.75
Vocational Education	82,360.82	9,333.06	91,693.86	15,077.98	106,771.84
Extension and Americanization	25,945.38	3,450.00	29,395.38	1,573.29	30,968.67
Conferences at Departments	.....	.....	.....	.....	2,319.75
Surveys	.....	.....	.....	.....	11,304.80
Examinations	.....	.....	.....	.....	1,598.31
Express, Postage, Stamps	.....	.....	.....	.....	10,379.02
Library	.....	.....	.....	.....	1,312.14
Total	304,579.51	90,679.35	395,258.86	54,483.31	476,656.19

TABLE 67.

Annual Total Expense and Total Expense per Capita of the Offices of State Superintendents of Public Instruction of Various States.

STATE	Total expense	Expense per capita
Ohio	$100,690.00	$.0175
Illinois	221,270.00	.0341
Indiana	116,515.00	.0397
Michigan	152,535.00	.0416
Pennsylvania	476,656.19	.0546
New Jersey	182,590.00	.0579
Massachusetts	311,504.36	.0809
Minnesota	208,110.00	.0874
Wisconsin	233,025.00	.0886
Connecticut	519,050.00	.137

Although it is impossible to compare expenses in detail of the State Education Office of Pennsylvania with those of other states we are able to offer here through the courtesy of the National Finance Inquiry Commission, comparative date relative to the total expenses of such offices during the past fiscal year in each of certain representative northern states. These data were obtained through personal inquiries in accordance with a uniform method; the data are therefore reliable and accurate, and as exactly comparable with the data for Pennsylvania as present conditions relative to budgeting, appropriating and accounting make possible. There are slight discrepancies, amounting to fractions of cents, in our computations of the expenses of Pennsylvania with those of the National Finance Inquiry Commission that can be accounted for on the ground of difference of judgment as to including or excluding certain appropriations. Our computations were made before we received the figures from the National Finance Inquiry Commission.

Table 67 (page 180) shows the total expenses of each State Education Office together with the expenses per capita of population of such offices. The data for the states other than Pennsylvania represent the appropriations made for the year. These figures were used by the Commission inasmuch as it seemed certain that the full appropriations would be employed. *The conclusion to be drawn from this table is that, notwithstanding that the expenses of Pennsylvania's Department of Public Instruction are large, they are not so much per capita of population as in the majority of the typical states chosen for comparison. This is brought out more clearly in Diagram 6. There are six of the twelve states which expend larger amounts per capita than does Pennsylvania.*

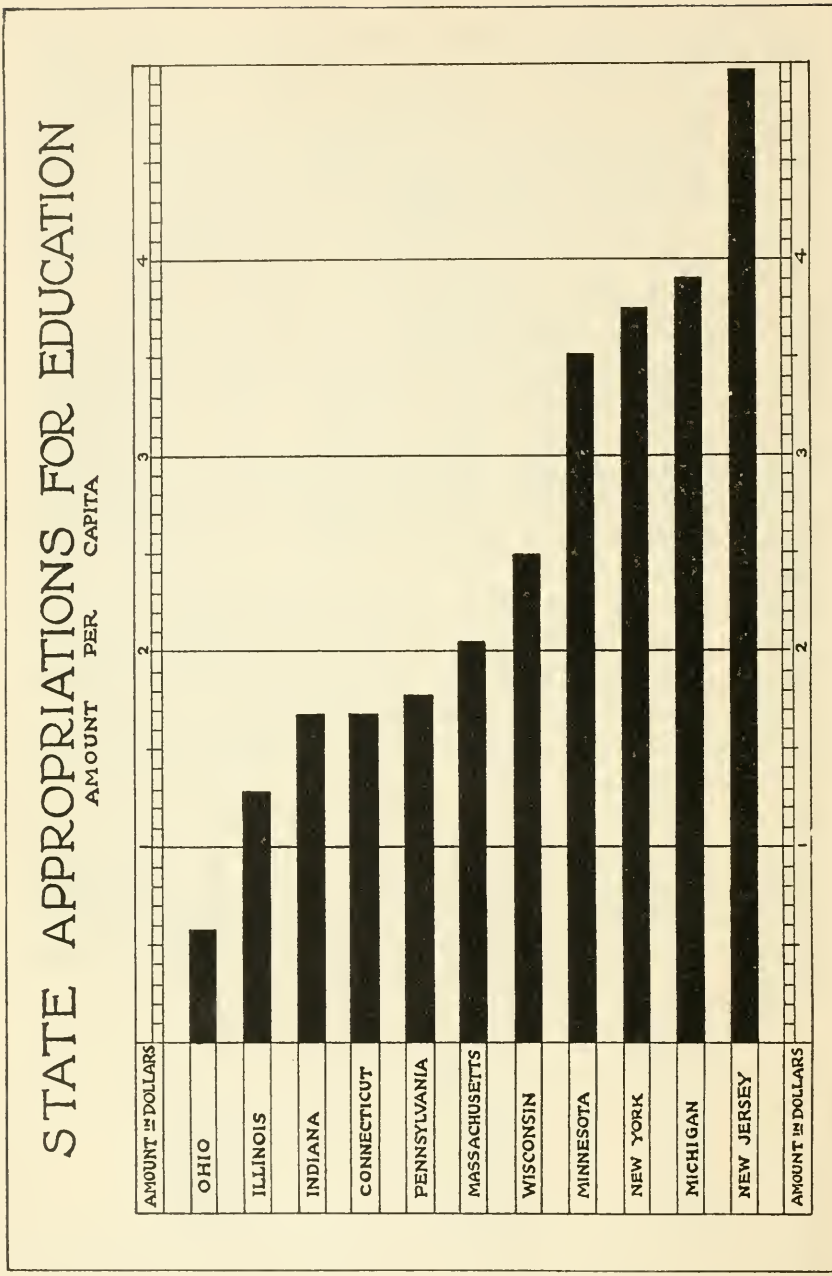

DIAGRAM 6.—EXPENSE PER CAPITA OF OFFICES OF STATE SUPERINTENDENTS OF PUBLIC INSTRUCTION, 1921–22. (BY COURTESY OF THE EDUCATIONAL FINANCE INQUIRY.)

TABLE 67A.

STATE APPROPRIATIONS FOR EDUCATION.

STATE	Total Appropriations		Education Office Costs		Education Office Costs to Total Appropriations
	Per Capita	Per Pupil	Per Capita	Per Pupil	Ratio
Ohio	$0.560	$3.159	$0.017	$0.099	$0.031
Illinois	1.580	6.896	0.034	0.184	0.027*
Indiana	1.670	8.488	0.040	0.202	0.024
Connecticut	1.673	8.934	0.137	0.730	0.082
Pennsylvania	1.761	9.483	0.051	0.275	0.029
Massachusetts	2.037*	12.677*	0.081*	0.503	0.040
Wisconsin	2.479	12.883	0.089	0.460	0.036
Minnesota	3.501	16.530	0.087	0.412	0.025
Michigan	3.901	19.830	0.041	0.216	0.011
New York	3.740	20.923	0.098	0.549	0.027*
New Jersey	4.977	26.537	0.058	0.309*	0.012
Average	2.534	13.304	0.067	0.358	0.031

*The starred amounts are the medians—that is, in each column there are as many amounts less, as there are amounts greater, than the one starred.

Another Table, Table 67A, furnished by the Commission gives in addition to the expense per capita, certain other unit costs which are of considerable value in passing judgment upon the expenses of the state office. This shows the costs per capita and per pupil of the total appropriations made to public education in the entire state, while the next two columns show the same unit costs of the administration of these appropriations through the State Education Office. The last column shows the ratio of the education office costs to total appropriations. It is well in passing to call attention to the fact that the total appropriations for education in Pennsylvania were not so high per capita or per pupil as in the majority of the states. Speaking now of the last column it is fair to assume that the magnitude of the expenses of a public education office is somewhat in proportion to the appropriations made for education; therefore, the appropriations made for the State Education Office should be fairly commensurate with the appropriations for education. Judging Pennsylvania from this point of view it is seen that, while in appropriations both per capita and per pupil she ranks fifth among the twelve representative states reported, that in the percent to appropriations expended for administration it ranks seventh. The validity of this figure depends upon the amount of the appropriations. Since the appropriations were below the norm we should

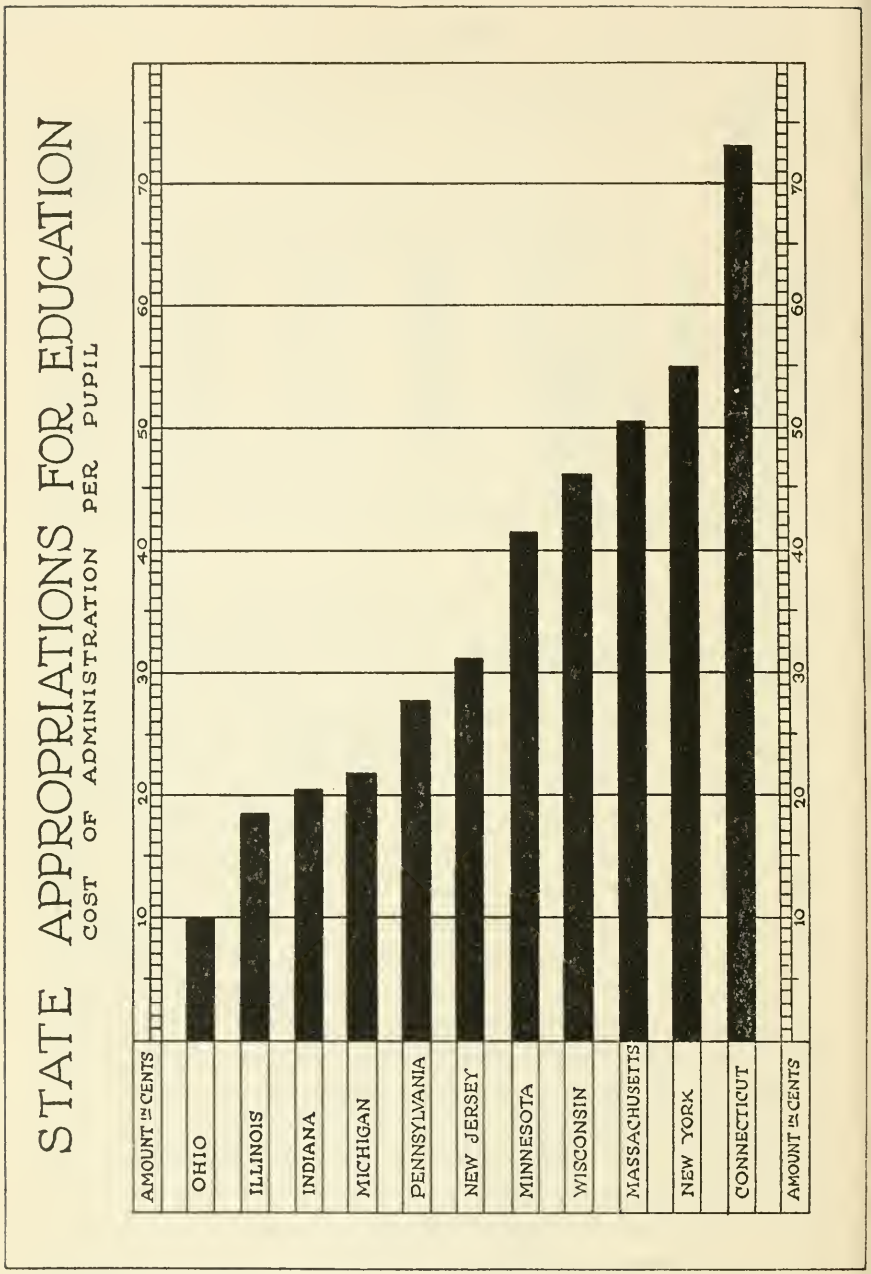

DIAGRAM 7.—EXPENSE PER PUPIL OF OFFICES OF STATE SUPERINTENDENTS OF PUBLIC INSTRUCTION, 1921–22. (BY COURTESY OF THE EDUCATIONAL FINANCE INQUIRY.)

expect an office of normal size on the basis of number of pupils to have a high ratio. A much better measure of the rightfulness of the expenses of the State Education Office is that furnished in the expense per capita population spoken of above and in the expense per pupil. In this respect Pennsylvania is again found to rank below the median, being fifth out of the twelve states. Diagram 7 serves to bring this relationship out more clearly.

In concluding this section upon the total expenses of the State Department of Public Instruction it is evident that the expenses of the office of the State Superintendent of Public Instruction under Doctor Finegan's administration have been as near the norm established by practice of representative states as could reasonably be expected.

What Has the State Department of Public Instruction Accomplished?

Having shown that the number of men and women upon the professional staff of the State Department of Public Instruction is no larger than the size of the state school system demands, and having justified the salaries paid them on the ground that it was impossible to secure others of as high qualifications at lower salaries, and having also shown that the expenses of the Department have been no higher than those of other representative states in proportion to population and to pupils enrolled, it remains to give such a statement as conditions permit regarding the actual work performed by the persons employed in order to provide some basis for answering the question whether the state has gotten full return for the money expended.

It is impossible to state adequately the results of the work of professional educational offices or of the specialists belonging to a central office such as that of the State Department of Public Instruction, not only because so much of what they do is intangible in its nature but also because of the hundreds of different persons with whom they come in contact each year, representing many local communities throughout the entire state. Aside from this limitation is another: that of the lack of space in such a brief report as this to tell of those things that might be reported. In spite of these difficulties we shall present such a statement of the work of

each of the bureaus in the Department as is believed will offer a sufficient basis for the forming of a satisfactory judgment. The head of each bureau in the Department and each specialist not attached to any bureau was asked to prepare a statement covering the field of his respective activities during the fiscal year closing May 31, 1922. That which is printed herewith is a digest of those statements. In the making of these digests effort was made to retain those elements which give the most definite and concrete measures of work performed. The reader should understand that they are valuable only as an indication of the work actually performed and that the description of the work done is by no means adequate. Another thing that should be borne in mind is that for many of the bureaus and specialists this was a beginning year and that much of their time was necessarily spent in getting acquainted with the conditions in the state and in the organization of the activities.

A Digest of Data Submitted by Department Heads.

The Administration Bureau.—This bureau is the clearing house for the entire department. It is charged with the distribution, apportionment, and accounting of all school funds. It has made many innovations, such as establishing standard accounting and budgeting systems; the accounts of the State Department of Public Instruction and of the Normal Schools have been gradually systematized, and unit costs have been emphasized. It has made a beginning in standardizing reports, gathering all forms of educational data, and preparing usable reports. This bureau also has charge of the department's professional library. It arranges itineraries and schedules meetings for members of the Department. It directs the work of the clerical department; it has charge of all purchases, supervises the preparing and filing of reports, and has standardized typing, mimeographing, and printing of all descriptions.

Attendance Bureau.—This bureau is charged with the enforcement of the compulsory attendance law. The activities of this bureau have resulted in the establishing of a state-wide child-accounting system; it has prepared a bulletin on attendance, complete teachers' monthly attendance cards, superintendents' summary attendance cards, state transfer certificates, a comprehensive school register, and has revised the census for children of school age.

It has assisted in organizing attendance bureaus in three cities, conducted many conferences, made over 2,000 visits to schools and summer sessions to explain the attendance law, the use of new records, or to investigate violations. Its members have addressed 39 institutes and numerous directors' conventions. The bureau receives from the various districts monthly attendance reports, has issued 100,000 perfect-attendance certificates and prepared and distributed as many as 280,000 circular letters on attendance.

The results of the work of this bureau are quite evident. Attendance throughout the state has appreciably improved. The average daily attendance has increased about 100,000, the percent of attendance about .80. It is claimed that approximately $3,000,000 more use has been obtained from the school expenditures as a result of this improved attendance. One thing is unquestionably

evident—there is a greater respect for the school attendance law than ever before, not only among parents and children, but among teachers and school officials. Standards of school attendance have been set up; age-grade tables prepared; the use of a state transfer certificate is simplifyng transfers and prevents loss from non-attendance in case of removals from one district to another.

Bureau of Health Education.—The work of this bureau, largely promotional, is educational, rather than inspectional. Its function is "to familiarize the public with the needs of health education and to co-ordinate all instruction in hygiene and physiology with other school subjects, etc." This bureau has divisions of nutrition, school nursing, hygiene, and physical education. Over 300 meetings, addresses, demonstrations, and nutrition classes were held in one year. Nutrition classes have been organized in all the Normal Schools and in 75 communities, 5 Normal Schools have been led to employ nutrition experts for their dining halls. The nutrition expert made a survey of meals served in 8 Normal Schools and 4 colleges and in the kitchen of Mt. Alto Sanatorium. Health work has been organized in Normal Schools in order that the graduates may be prepared to carry on proper health instuction. The supervisors of physical education have visited all the counties in the state; have given practical demonstrations of relief exercises to thousands of teachers and children. Field Days have been organized in additional counties; conferences were held with the county superintendents; and many rural schools were visited and demonstrations were given.

The Director and his assistants visited many institutions; they have prepared syllabi in hygiene and physical education. Great interest in health has been created among teachers; the hot lunch idea has spread; there has been a marked increase in the number of special teachers and a steady demand has been made for school nurses who are not available now. A beginning, however, has been made in training school nurses.

Bureau of Rural Education.—The function of this bureau is largely to create a sentiment for better rural schools, and to encourage local districts in organizing and fostering consolidation. This has entailed much study on the part of the staff and many conferences with school officials. The adjustment of transportation claims is handled from this office and has resulted in the saving to the school districts in one year of $20,000. About two-thirds of the time of the director and his assistants is devoted to field work. There were fifty-six consolidated schools organized, twenty-eight of which are not ready for use; 403 conferences were held, 351 sites inspected, 181 surveys made, and 112 consolidated schools, 458 other schools and 86 counties visited. 275 addresses were made before institutes, conventions, community meetings and joint meetings.

Subject Directors.—There are eight subject directors, also a director of school libraries, a director of speech improvement, an inspector of High Schools, and a director of Junior High Schools, making a total of twelve in directorial rank. The function of the subject directors is to organize and direct instruction in their field and to assist in the training of teachers for their subjects through co-operation with Normal Schools and Colleges.

In a general way all these directors of subjects participated in the Philadelphia Survey. All of them began, are preparing, or have completed one or more syllabi; approximately 20 in all have been prepared. These directors have held frequent conferences with various committees of teachers in the preparation of new courses of study, and have spent much time in research and collaboration. Many of them have been employed, not only in their own special field, but in the investigation of general school problems, and have been sent out in the field to organize, assist, observe and promote such programs. It is estimated that over 100 institutes and other meetings were addressed by these

directors; they have attended 140 educational meetings, parent-teacher association meetings, business men's meetings, Rotary Clubs, etc. Three of these taught in summer sessions in the state without additional compensation, and others were employed in organizing extension courses and professional courses for the summer sessions. The director of music organized a School of Music for supervisors at West Chester. This school attracted not only 315 Pennsylvania teachers of music, but 200 from without the state. The tuition from the latter netted a profit that was equal to the total expenses of maintaining the director and his two assistants for the year.

The beneficent results of the preliminary work of these subject directors may be seen in the general toning up of the teacher-training work in the Normal Schools and Colleges, particularly in such subjects as music, art, science, and English. Clearer objectives are being set up, the rank and file of the teachers are being stimulated by the new syllabi and by the conferences the directors have held. Direction is being given to instruction especially in those districts where supervision has been lacking. These directors have also shared in the organization work connected with the several Educational Congresses held at Harrisburg.

School Buildings Bureaus.—The School Buildings Bureau is charged with the revision and approval of all Normal School and public school building plans in accordance with law, and it works out building programs for districts requesting them; revises plans so as to meet all the legal requirements and at the same time keeps within the financial limitations of districts. Another important phase of the bureau's work is that it compiles data bearing on standard costs of building materials and construction so that these data may be available to the districts of the state gratis. Some of the work done by this bureau the past year (1921-22) are: prepared plans for 41 situations, costing about $3,000,000; supervised and revised plans and specifications for 535 new and rebuilt buildings; prepared 100 miscellaneous sketches; 68 standardized plans for rural school buildings; and held 954 conferences with school officials. A survey service is maintained which renders gratis expert service to school districts desiring assistance. It participated in several large city surveys and completed its work on the Philadelphia Survey.

Since 1914 it has in an advisory capacity examined plans and specifications for 2200 building projects, costing approximately $50,000,000; it has saved rural schools over $83,000 in architects' fees, and other districts the sum of $117,000; it has passed on school buildings whose aggregate cost is $64,113,133. The commercial value of the architectural service on this outlay would be $704,013, while the expense of the bureau since 1914 has been only $75,000.

Bureau of Special Education.—It is difficult to evaluate the work of this bureau because of the seriousness of the problem it must deal with. For some time its work will be promotional in that school officials need to be shown the problem of retardation and the great financial burden it entails. This bureau is now preparing a hand book for special classes and a travel exhibit. It has assisted other bureaus in preparing a program of educational guidance and assisted in organizing fourteen special courses; one joint county school was organized but not started; a round table conference was established in the Pennsylvania State Education Association and a visiting teacher secured for Rochester, Pennsylvania.

The Teacher Bureau.—This bureau is charged with the important work of teacher training and teacher placing. In this capacity it exercises supervision of the fourteen Normal Schools and issues teachers' certificates. The office work of this bureau is very heavy; it reports that it handled from April 15 to September 1, 1921, a daily average of 461 pieces of incoming and 420 of outgoing mail. The office maintained a card index of every teacher in the state, except in Philadelphia and in Pittsburgh. It has handled 20,000 teacher ratings and

has issued 22,754 certificates. The certificate regulations adopted by the State Council of Education were prepared by this bureau.

Under its guidance the Normal School curricula have been revised and professionalized; practice facilities increased from 4436 children to 6652; practice teaching introduced through co-perative efforts in most of the colleges; training of vocational teachers widened. One teacher-training conference was held in Lock Haven at which 350 Normal School teachers participated The Normal Schools have been visited and Departments of Education in colleges observed. The Normal School enrollment increased from 4117 to 5706 (est.) 1922-23.

Members of the bureau have delivered 129 addresses and attended and conducted numerous conferences at summer sessions and elsewhere without additional compensation. Correspondence courses have been organized in six, and extension courses in eleven Normal Schools. Through its certificate requirements 30,707 teachers attended summer sessions this past summer, 9,150 of these being in the Normal Schools of the state.

The Placement Service reports 6750 teachers registered, 758 requests for teachers, and 278 placed. The estimated value of this service at the private-bureau rate is $65,000, while the cost of the entire bureau is $32,100.

Bureau of Vocational Education.—This bureau is divided into four divisions—Agricultural Education, Industrial Education, Home Economics Education, and Continuation Schools. It has the supervision of the strictly vocational schools, and also of such vocational departments as are established in high schools; it allocates funds for the training of vocational teachers and co-operates with the Teacher Bureau in their training.

The *Agricultural Division* reports 125 centers organized in vocational agriculture with an enrollment of 3074 pupils, home gardening on 71 acres in 28 cities, with 15,000 pupils. It has conducted experiments in corn growing; has made in two years 421 supervisory and 175 promotional visits, has planned and directed the work of the county supervisors and prepared educational farm exhibits for the State Farm Show, besides preparing two bulletins and eleven unit courses and three syllabi.

The *Industrial Education Division* participated in the formulation of the Program of Vocational Guidance, prepared three syllabi, assisted in organizing vocational guidance at various centers, and took part in the Philadelphia Survey. It organized 22 vocational industrial schools and at present supervises and visits the 78 trade schools that have an enrollment of 7800 students.

It has been asserted and it is believed that Pennsylvania's rank in industrial education is not only superior to that of any other state in the Union, but is lower in per capita costs.

The *Division of Home Economics* is so organized that three-fourths of the time of the director and his assistants is spent in field work. This division establishes Home Economics Departments in schools, and also directs the training of home economics teachers in three Normal Schools and ten colleges. It has organized programs for the county supervisors, who teach as well as supervise, prepared bulletins, type studies, etc., and has established a Placement Service to assist in securing and placing teachers of home economics. Exclusive of Philadelphia, there are in the state 455 schools offering Home Economic courses, with 766 teachers and 47,463 pupils. Only 266 high schools out of 725 are represented in this work. The possible scope of this work may be seen when it is estimated from census reports that fully 800,000 girls should pursue this type of work in Pennsylvania.

The *Continuation School Division* administers the distribution of $138,268 of state funds. The assistant director in charge of continuation schools visited 110 districts with 404 teachers and 35,331 pupils; assisted in the certification of continuation teachers; guided and simplified their training; prepared a syllabus of 150 pages and a bulletin of 75 pages. The Assistant Director also taught without additional compensation in the summer session at State College.

Having now described the work of the bureau chiefs and also of the specialists, as reported by them, it remains for us to express a judgment as to whether they have given to the state full return. Direct benefit can be expressed in dollars saved by the amounts saved local school districts in the more economical erection of school buildings, the tuition received from students outside the state attending the Summer School of Music at West Chester, in the larger amounts of products expressed in days of education that the local school districts have produced with the same expenditure of money through the better enforcement of the compulsory education law. These have a value greater than the expenses of the entire department.

The figures furnished as to the number of meetings addressed, the number of schools visited, the number of letters written, the number of conferences held, indicate that they have given their entire time to the work for which they were employed. The quality of the service rendered can better be inferred possibly from the high qualifications of the men and women who form the professional staff. As a matter of fact, they have been so interested in their work that most of them have given many of their evenings as well as their days to the work with which they were put in charge. This high quality of ability combined with long hours of service seems to warrant the conclusion that the state has received the benefit of the best service obtainable for the money expended and that it has been given as widely throughout the state as conditions permitted. It is believed that there is no State Education Office in the Union with a more competent personnel than that of Pennsylvania, nor one that has produced under similar conditions more direct benefit to the public schools of the state.

Possible Improvements.

There are practically always connected with any office, no matter how efficiently conducted, certain weaknesses or shortcomings which should be corrected. Our own State Education Office is not an exception in this respect. Certain of these will be mentioned at this point.

The Pennsylvania State Education Office has upon its staff specialists who are designated as directors of mathematics, Eng-

lish, science, etc. There is also a director and two supervisors of special education, a director of junior high schools, and another director of speech defects.

These specialists are rendering very valuable service to the state and the instrumentalities for doing this kind of work should be increased. Should state Schools of Education be established in the universities, professors in these institutions might be used to supplement such efforts. This co-operation between the State Office and the universities should result in great good to both. The contacts which the professors of the universities would have with the schools while working in behalf of the State Office would widen their views of educational activities and thus increase their efficiency as teachers. The specialists might in turn extend the courses and addresses they are now giving in universities and Normal Schools, thus increasing their professional equipment by larger contacts with these higher institutions and also rendering greater service through the increased number of student teachers brought under their instruction.

The appropriations for vocational education in Pennsylvania seem large. In their favor it can be stated that we have probably the largest state system of vocational education in the United States and one of the most efficient. Since that is the case, it would seem as though the time was approaching in which a larger proportion of the expense of such schools should be borne by the local communities, inasmuch as it is the purpose of such types of state and national aid to introduce new forms of education and to help support them until such time as the local communities are so convinced of their desirability that they will continue them of their own effort. The Smith-Hughes Act appropriates within certain limits an amount of money equal to that furnished by the state or the local districts or by the two combined. The present practice in Pennsylvania is for the local communities to pay but one-third, for the state to pay one-third, and the national government, one-third. Just how much may be saved in this way it is not possible to say without a much more careful inquiry than it has been possible to make.

It is a question whether the fullest returns have been obtained from the appropriations for Americanization. This work has recently been distributed in various division offices, each with an

assistant director or supervisor in charge. This type of work is new and those in charge are obliged to feel their way. It is believed that it would be possible to secure a better co-ordination among these various offices and an exchange of experience which would be helpful to the work throughout the state. In this connection it is important to point out that there is great need for the development of this work in this state because of the large number of foreign adult illiterates and that at the present time local public school systems have great need of the direct assistance that a State Office can give them. In fact, the local school units of the state as now organized are not in many cases suitable territorial units for carrying on this work.

The State Education Office and its Relation to the Public Schools, Normal Schools and Higher Educational Institutions.

It is important in the granting of state support to the various branches of public education in the state that careful consideration be given to the organization of the boards in control of those appropriations suggested in previous sections of this report, and of the relationships of the State Superintendent of Public Instruction to these boards on the other hand and to the Normal Schools, colleges and universities on the other hand.

The primary functions of the State Superintendent of Public Instruction are concerned with the public schools as conducted in the local school districts. This is the fundamental part of the state's public school system. In so far as the Legislature does not determine policies and methods with regard to the state aid of local school districts and the standards that should be maintained in order to receive its benefits, this function should be performed by a state board with the advice and assistance of the State Superintendent of Public Instruction. His own work should be to see that the standards prescribed by the state laws and the regulations of the state board are observed in the local school districts, to advise the Legislature and the state board as to the conditions in the public schools and suggest proper courses of action for them to take for their improvement. He and the members of his staff should also provide in every possible way for

the stimulation of local interest in schools and for the advancement of the highest possible standards in them. To this end, he and they should endeavor to bring about the co-operation of all agencies, educational and otherwise, that are interested in the advancement of education.

The second group of functions of the State Department of Public Instruction is connected with the Normal Schools maintained by the state. In addition to those types of functions exercised in the operation of the local elementary and secondary schools—maintenance of standards—reporting to the Legislature, awakening of interest, stimulation and practical assistance—the State Department should have more immediate responsibility in their administration. This is desirable not only by reason of securing the fullest co-operation between all such schools and the necessity of bringing about the closest possible co-ordination of effort between their activities and the plan for the development of the public schools, but also because of the importance of having a single executive professional officer with a corps of expert assistants to assist a central board of control in the distribution of the state funds appropriated for their support and in getting the fullest returns for the money thus expended.

A third group of functions belongs to higher education. While they are similar in kind to those of the Normal Schools, yet because of the smaller number of institutions involved and the more specialized type of management required it would hardly be expected that they should be exercised to the same degree as in the former class of institutions. While the State Superintendent of Public Instruction might rightfully be expected to participate more directly through advice given a lay board of control in the administration of schools of education connected with universities and colleges because of the desirability of co-ordinating their activities not only among themselves but also with the public school system, nevertheless he should have some part in the control of all phases of state-supported higher education in order to insure beyond doubt that the educational needs of the state might be the better interpreted and the more fully met.

Finally, the fourth group of functions is the development of the fullest co-ordination among all classes of schools. Without the right to determine finally in any case without the right to grant,

yet with full opportunity to plan and to recommend in any field to the Legislature or to a legislative board, and with authority to maintain the standards and to execute the plans within the scope properly belonging to an executive officer of a central board or Legislature, he is thus in a position where he can guide the development of education of all grades while the responsibility for determination of the policies rests upon the representatives of the people serving as members of boards or in the Legislature itself.

Such a distribution of functions between expert and lay elements furnishes the most desirable condition for the exercise of leadership and for the securing of the strongest and most consistent support from the people for the plans adopted, for the expression in its highest form of the will of the people regarding public education, and for securing the strongest and most consistent support of the plans adopted.

CHAPTER VI.

Relative Needs.

The purpose of this chapter is to bring together that which has been said in previous chapters relative to appropriations, to compare the appropriations of the present biennium with those of the previous bienniums and to furnish such data relative to amounts and distributions of the cost of education in other states as will assist in reaching a judgment regarding appropriations in Pennsylvania.

The appropriations for education made by the Legislature of Pennsylvania for each of the bienniums from 1909 to the present are given in tabular form in Table 68 (page 196). The appropriations are classified according to the different types of schools and activities. Appropriations closely related to those of the State Superintendent's Office, although not properly a part thereof, are grouped under one head called "Miscellaneous." The total appropriations for each group are shown at the top of the group opposite the general title. It will be noticed that the appropriations have greatly increased from 1909 to 1921. The appropriations for education for the biennium 1921-23 make up 32.1 percent of the total. This percentage is larger than for any previous biennium since 1909, which percent was practically the same. It should be remembered in this connection that interest in education has sagged in this state during the past two decades. When comparison is made with the practice of other states it is found as is shown in Table 11 (page 36) that the median percent for the United States for the year 1919 was 37.5 percent. This means that in 24 states the appropriations for education consumed a larger portion of the total appropriations while in 24 states a less percentage was so expended. It may thus be concluded that Pennsylvania with a percentage of 32.1 may increase her proportion of total appropriations for education by 5 percent before reaching the norm as determined by present practice in other states.

TABLE 68.

Distribution of State Appropriations for Education.

(Cents Disregarded)

	1909	1911	1913	1915	1917	1919	1921
I. State Administration	$115,800	$148,800	$197,600	$203,300	$205,200	$522,500	$915,000
1. State Supt. Office	10,000	10,000	10,000	10,000	10,000	24,000	24,000
2. Deputy State Supts	18,200	18,200	18,200	28,300	25,200	27,000	27,000
3. Dept. Bureaus, etc	22,600	54,600	61,400	44,000	42,500	380,000	655,000
4. State Board of Education	30,000	25,000	30,000	40,000	40,000	.....	.....
5. Miscellaneous*	35,000	41,000	78,000	81,000	87,500	91,500	209,000
(a) Bureau Prof. Education	.....	.....	15,000	18,000	18,000	20,000	22,000
(b) Bureau Med. Ed. and Licensure	3,000	3,000	30,000	42,000	42,000	42,000	42,000
(c) Normal School Examiners	6,000	6,000	6,000	6,000	5,500	5,500	.....
(d) Perm. Cert. Examiners	4,000	10,000	5,000	6,000	5,000	5,000	.....
(e) College and University Council	1,000	1,000	1,000	1,000	1,000	1,000	.....
(f) Dental Council	4,000	4,000	4,000	3,000	3,000	3,000	3,000
(g) School Journal	5,000	5,000	5,000	5,000	5,000	5,000	7,000
(h) Extension Lectures	12,000	12,000	12,000	.....	.....	.....	.....
(i) Education Blind Children	.....	.....	.....	.....	8,000	10,000	10,000
(j) Americanization	.....	.....	.....	.....	.....	.....	125,000
II. Local Administration—County	230,000	230,000	240,000	441,600	470,000	813,350	903,500
1. Salaries Co. Supts	230,000	230,000	240,000	240,000	250,000	315,980	387,500
2. Expenses Co. Supts	.....	.....	.....	.....	.....	66,000	66,000
3. Salaries Asst. Co. Supts	.....	.....	.....	201,600	220,000	298,800	365,000
4. Expenses Asst. Co. Supts	.....	.....	.....	.....	.....	84,000	85,000
5. Deficits	.....	.....	.....	.....	.....	48,570	.....
III. Common Schools	14,170,000	14,170,000	14,060,000	13,958,400	15,517,000	14,801,220	24,693,500
1. High School Aid and Tuition	550,000	550,000	550,000	550,000	750,000	750,000	.....
2. Transportation**	.....	.....	.....	.....	.....	.....	200,000
3. Consolidation	.....	.....	.....	.....	.....	.....	400,000
4. To Local Districts	13,620,000	13,620,000	13,510,000	13,408,400	14,767,000	14,051,220	22,593,500
5. Deficit—Woodruff Act	.....	.....	.....	.....	.....	.....	1,500,000

*Figures of this line are total of sub-heads under miscellaneous.
**$100,000 reappropriated from an unexpended balance of $350,000 (Act 410A—1921).

TABLE 68—Concluded.

IV. Normal Schools	$1,065,000	$960,000	$1,085,000	$960,000	$1,505,000	$2,046,536	$4,900,316
1. Maintenance	260,000	260,000	260,000	260,000	416,000	460,000	2,993,000
2. Buildings	.....	.....	.....	.....	139,000	139,000	500,000
3. Debts, Mortgages, etc	130,000	.....	.....	.....	25,000	225,000	825,000
4. Purchases	.....	.....	100,000	100,000	325,000	100,000	.....
5. Aid to Students	600,000	600,000	600,000	600,000	600,000	850,000	.....
6. Deficits	75,000	100,000	125,000	.....	.....	272,536	582,316
V. Vocational Education All Types	.....	.....	137,000	1,325,000	500,000	650,000	1,450,000
1. Training of Teachers	.....	.....	.....	.....	300,000	350,000	850,000
2. Depts. of Voc. Ed. and Exp. Adm.	.....	.....	137,000	325,000	200,000	300,000	600,000
3. Vocational Education	.....	.....	.....	1,000,000	.....	.....	.....
VI. Higher Educational Institutions	1,037,510	2,000,000	2,540,000	2,250,000	2,935,000	3,786,462	4,972,000
Totals	16,618,310	17,508,800	18,259,600	19,138,300	21,132,200	22,620,068	37,834,316
Totals App'd Appropriations by Governor	52,297,468	59,339,528	66,209,141	67,470,686	82,203,618	103,862,431	118,060,133
Percent of total Appropriations for Education	31.8	29.6	27.6	28.4	25.8	21.9	32.1

TABLE 69.

Amount and Percent Appropriated for each Function.

	1909	1911	1913	1915	1917	1919	1921
Appropriation for Education	$16,618,310	$17,508,800	$18,259,600	$19,138,300	$21,132,200	$22,620,068	$37,834,316
Percent of Total State Appropriation	31.8	29.6	27.6	28.4	25.8	21.9	32.1
State Administration Amount	115,800	148,800	197,600	203,300	205,200	522,500	915,000
Percent	.70	.80	1.1	1.0	.9	2.3	2.4
County Administration Amount	230,000	230,000	240,000	441,600	470,000	813,350	903,500
Percent	1.4	1.3	1.3	2.3	2.2	3.6	2.4
Local Districts—Common Schools Amount	14,170,000	14,170,000	14,060,000	13,958,400	15,537,000	14,801,220	24,693,500
Percent	85.3	81.0	76.9	73.3	73.5	65.4	65.3
Normal Schools Amount	1,065,000	960,000	1,085,000	960,000	1,505,000	2,046,536	4,900,316
Percent	6.4	5.5	6.0	5.0	7.1	9.1	13.0
Vocational Education Amount	.....	.....	137,000	1,325,000	500,000	650,000	1,450,000
Percent	.....	.....	.8	6.9	2.4	2.9	3.8
Higher Education	1,037,510	2,000,000	2,540,000	2,250,000	2,935,000	3,786,462	4,972,000
Percent	6.2	11.4	13.9	11.8	13.9	16.7	13.1

Turning now to an analysis of this total appropriation of $37,834,316 it may be seen from Table 69 that practically two-thirds of it is devoted to the support of local school districts and that the normal schools and higher educational institutions are each given slightly over one-eighth. The balance amounting to one-twelfth goes to the support of the state and county administrative offices and to vocational education. It costs practically as much to support the State Education Office as is granted to the 65 counties in the support of their offices.

Comparing the percentages with those of the previous biennium it is observed that taken as a whole the portion going to the state and county offices and to the normal schools has greatly increased, that the appropriations for higher educational institutions while irregular have remained about the same, and that the appropriation going to the local school districts has steadily decreased from 85 percent in 1909 to 65 percent in 1921.

Regarding the reasonableness of these distributions it has been shown in Table 68 that the cost of the State Education Office in Pennsylvania per pupil enrolled and per capita of population was slightly below the median of 11 representative states. It would seem, therefore, that the appropriations for the State Education Office were not excessive. Comparative data are not available relative to the cost of county administration. While the salaries paid the county superintendents of the state are higher than those in any other state, the ability of men filling the office is fully equal, if not superior, to that of any other similar group. Another fact that should be recognized in this connection is that these county superintendents have a larger number of schools and pupils to supervise than in other states. It is believed that the appropriations for this purpose are not too high.

As regards the proportion of the total appropriation going to the local school districts Table 68 should again be cited. It was shown that in the year 1920 the percentage of the total revenue receipts of local school districts coming from the state was 16 percent in Pennsylvania, and that in 25 other states local districts received larger proportions. Judging by the practice of other states it seems that the appropriations for this purpose are slightly below the norm.

Comparative data relative to the costs of vocational education

are not at hand. It was pointed out in Chapter V that, in view of the fact that vocational education in this state has become so well established and has reached such a high stage of efficiency, possibly the time has come when a larger proportion of the burden should be transferred to local districts. This appropriation should not be changed, however, unless the system of General Aid recommended in Chapter II is adopted.

TABLE 70.

Distribution of State Money (Appropriations and Income from Permanent Funds) Given to Various Types of Schools in the States of the Union, 1920.

States	Public Schools	Normal Schools	Colleges and Universities	Total
Alabama	$4,326,842	$ 156,614	$ 375,716	$ 4,859,172
Arizona	948,977	385,555	488,868	1,823,400
Arkansas	1,812,959	31,000	250,000	2,093,959
California	8,608,848	1,066,153	2,682,597	12,357,598
Colorado	1,189,398	84,739	1,051,238	2,325,375
Connecticut	1,816,216	602,085	426,111	2,744,412
Delaware	562,128	.....	94,045	656,173
Florida	430,257	.....	350,710	780,967
Georgia	3,899,250	285,500	479,918	4,664,668
Idaho	642,965	189,807	483,890	1,316,662
Illinois	5,535,220	418,670	2,871,500	6,825,390
Indiana	4,219,990	313,816	1,438,650	5,972,456
Iowa	467,388	.....	2,807,733	3,275,121
Kansas	564,675	563,432	1,867,103	2,995,210
Kentucky	2,868,592	286,682	426,040	3,581,314
Louisiana	2,472,125	98,000	210,042	2,780,167
Maine	2,199,411	142,924	220,983	2,563,318
Maryland	2,038,785	132,500	247,526	2,418,811
Massachusetts	4,558,627	746,889	918,739	6,224,255
Michigan	7,067,032	707,855	3,209,144	10,984,031
Minnesota	6,025,313	584,585	2,948,851	9,558,749
Mississippi	2,022,800	79,553	787,707	2,889,860
Missouri	3,610,889	498,648	913,297	5,022,834
Montana	1,122,150	85,000	791,501	1,998,651
Nebraska	997,932	301,645	1,532,425	2,831,002
Nevada	359,120	.....	241,708	600,828
New Hampshire	336,060	91,098	183,075	610,233
New Jersey	13,745,932	418,675	316,978	14,481,585
New Mexico	625,596	131,454	263,850	1,020,900
New York	12,731,091	1,388,079	1,532,906	15,652,076
North Carolina	3,425,532	246,959	783,843	4,456,334
North Dakota	1,415,889	448,763	567,680	2,432,332
Ohio	4,148,181	430,218	2,123,633	6,702,032
Oklahoma	1,433,003	479,460	1,631,783	3,544,246
Oregon	445,900	50,261	1,823,653	2,319,814
Pennsylvania*	11,485,630	608,780	1,893,238	13,987,648
Rhode Island	237,695	81,000	130,928	449,623
South Carolina	958,823	186,990	806,685	1,952,498
South Dakota	1,713,534	289,665	750,658	2,753,857
Tennessee	1,529,525	131,381	273,000	1,933,906
Texas	17,352,412	246,660	2,238,121	19,837,193
Utah	2,014,177	.....	1,127,566	3,141,743
Vermont	1,137,108	15,246	113,173	1,265,527
Virginia	4,289,524	214,150	733,008	5,236,682
Washington	3,634,997	637,670	1,825,291	6,097,958
W. Virginia	709,531	416,378	562,561	1,688,470
Wisconsin	3,669,528	1,150,541	1,926,160	6,746,229
Wyoming	736,889	.....	203,858	940,747

*Data for 1921: Public Schools, $13,523,500; Normal Schools, $2,450,158; Colleges and universities, $2,486,000; total, $18,459,658.

Comparative data relative to the appropriations for normal schools and for colleges and universities are available. It is possible also to make comparison between such appropriations and the appropriations made for the benefit of the public schools. These

TABLE 71.

PER CAPITA DISTRIBUTIONS OF STATE MONEY (APPROPRIATIONS AND INCOME FROM PERMANENT FUNDS) GIVEN TO THE VARIOUS TYPES OF SCHOOLS IN THE STATES OF THE UNION, 1920.

States	Public Schools	Normal Schools	Colleges and Universities	Total
Alabama	$1.85	$ .06	$ .16	$2.07
Arizona	2.84	1.15	1.46	5.45
Arkansas	1.03	.02	.14	1.19
California	2.52	.31	.78	3.61
Colorado	1.28	.09	1.13	2.50
Connecticut	1.31	36	.31	1.98
Delaware	2.52	.....	.42	2.94
Florida	.44	.....	.36	.80
Georgia	1.35	.10	.16	1.61
Idaho	1.49	.44	1.12	3.05
Illinois	.85	.07	.44	1.36
Indiana	1.44	.10	.49	2.03
Iowa	.19	.....	1.17	1.36
Kansas	.32	.32	1.06	1.70
Kentucky	1.19	.12	.17	1.48
Louisiana	1.38	.05	.12	1.55
Maine	2.86	.18	.29	3.33
Maryland	1.41	.09	.17	1.67
Massachusetts	1.18	.19	.24	1.61
Michigan	1.93	.19	.88	3.00
Minnesota	2.53	.24	1.23	4.00
Mississippi	1.13	.04	.44	1.61
Missouri	1.06	.14	.27	1.47
Montana	2.05	.15	1.44	3.64
Nebraska	.77	.23	1.19	2.19
Nevada	4.66	.....	3.14	7.80
New Hampshire	.76	.20	.41	1.37
New Jersey	4.36	.13	.10	4.59
New Mexico	1.74	.36	.73	2.83
New York	1.22	.13	.15	1.50
North Carolina	1.34	.10	.30	1.74
North Dakota	2.21	.70	.89	3.80
Ohio	.72	.07	.37	1.16
Oklahoma	.71	.23	.81	1.75
Oregon	.57	.06	2.34	2.97
Pennsylvania*	1.31	.07	.22	1.60
Rhode Island	.39	.13	.22	.74
South Carolina	.57	.11	.48	1.16
South Dakota	2.72	.46	1.19	4.37
Tennessee	.68	.06	.12	.86
Texas	3.72	.05	.48	4.25
Utah	4.58	.....	2.56	7.14
Vermont	3.25	.04	.32	3.61
Virginia	1.86	.09	.32	2.27
Washington	2.69	.47	1.35	4.51
West Virginia	.49	.28	.38	1.15
Wisconsin	1.39	.44	.73	2.56
Wyoming	.38	.....	.10	.48

*Data for 1921: Public Schools, $1.55; Normal Schools, $.28; colleges and universities $.29. Total $2.12.

statistics are furnished through the courtesy of the Commissioner of Education for the United States and are for the year 1919-20. The actual distribution of state money to each of these three types of schools including the income from the permanent school funds,

TABLE 72.

DISTRIBUTION BY STATES OF PER CAPITA AMOUNTS OF STATE MONEY (APPROPRIATIONS AND INCOME FROM PERMANENT FUNDS) GIVEN TO VARIOUS TYPES OF SCHOOLS IN 48 STATES OF THE UNION—1920.

Per Capita Amount	Public Schools	Normal Schools*	Colleges and Universities
$ 0– .04	.....	3	.....
.05– .09	.....	11	.....
.10– .14	1	9	5
.15– .19	.....	4	5
.20– .24	.....	4	3
.25– .29	.....	1	2
.30– .34	1	2	4
.35– .39	2	2	3
.40– .44	1	2	4
.45– .49	1	2	3
.50– .54	1	.....	.....
.55– .59	1	.....	.....
.65– .69	1	.....	.....
.70– .74	2	1	2
.75– .79	2	.....	2
.85– .89	1	.....	2
1.00–1.04	1	.....	.....
1.05–1.09	1	.....	1
1.10–1.14	1	.....	2
1.15–1.19	2	1	3
1.20–1.24	1	.....	1
1.25–1.29	1	.....	.....
1.30–1.34	4	.....	.....
1.35–1.39	2	.....	1
1.40–1.44	2	.....	1
1.45–1.49	1	.....	1
1.70–1.74	1	.....	.....
1.85–1.89	2	.....	.....
1.90–1.94	1	.....	.....
2.05–2.09	1	.....	.....
2.20–2.24	1	.....	.....
2.30–2.34	.....	.....	1
2.45–2.49	.....	.....	.....
2.50–2.54	3	.....	.....
2.55–2.59	.....	.....	1
2.65–2.69	1	.....	.....
2.70–2.74	1	.....	.....
2.85–2.89	2	.....	.....
3.00 and over	5	.....	1
	48	42	48
Medians	$1.35	$.163	$.425

*Six states have no normal schools.

which go to the benefit of the public schools, is given in Table 70 (page 200). From this it may be seen that in terms of dollars given, the appropriations of Texas, New Jersey and New York exceed that of Pennsylvania. The statement is no longer true that Pennsylvania gives larger appropriations to its local schools than any other state.

There are six states that granted larger appropriations to normal schools: New York, Wisconsin, California, Massachusetts, Michigan and Washington. In appropriations to the higher educational institutions, Pennsylvania is ninth, Michigan, Minnesota, Illinois, Iowa, California, Texas, Ohio and Wisconsin granting larger amounts. The appropriations of three other states, Oregon, Kansas and Washington, were less than Pennsylvania by less than $75,000. The combined appropriations ($8,084,155) of Michigan, Wisconsin and Minnesota for higher education in 1920, which states taken together have approximately the same population as Pennsylvania, were over four times as much as that for Pennsylvania ($1,893,238).

The population of these states except that of New York is less than Pennsylvania. It seems, therefore, that as measured by the probable needs of the state, Pennsylvania is not expending as much as many states. In order to test this out Table 71 (page 201) has been prepared, reducing the actual costs given in Table 70 to costs per capita. Then, in order to have them in a form in which comparison may be more easily made, distribution tables covering each of the columns contained therein were worked out. These are presented in Table 72 for public schools, for normal schools and for colleges and universities. Table 73 (page 204) gives the figures for all three combined. Taking up for first consideration Table 71, it will be seen that Pennsylvania's per capita, $1.60, is 40 cents less than the median for the group. This is another indication that Pennsylvania's educational appropriations might rightfully be increased.

Turning now to the distribution of this $1.60 we find from Table 72 that the per capita for public schools, $1.31, is slightly below the median, $1.35. This measure of the situation in Pennsylvania is in close agreement with that furnished in Table 69, referred to above, where it was shown that in the percentage of total revenue receipts to local school districts coming from the state, Pennsylvania's percentage was about five-tenths of one per cent less than the median. From this the inference may be drawn that the appropriations for public schools were, in 1920, near the norm as measured by the practices of other states. There are, however, certain difficulties always connected with such comparative measures. They cannot because of their general nature take into account the details of the situation in the various states. The

data given in Chapter II on the Public Schools indicate that the minimum appropriation for public schools in this state, in order to equalize the differences in wealth and to stimulate all districts to a proper degree, should be about $18,000,000 per year.

Table 72 also shows that the expenditures for normal schools in the previous biennium were very low as compared with other states. The appropriation for the present biennium, which increases the cost per capita from 7 cents to 28 cents, is probably not much above the norm, if any, for 1921-22. In Chapter III it was shown, however, that the costs per pupil were not on the whole so high.

Pennsylvania's appropriation to higher educational institutions is below the median amount per capita of population which in 1920 was 42½ cents. Pennsylvania's per capita in 1920 was 22 cents, and in 1921, 29 cents. It follows, therefore, that Pennsylvania would be warranted, upon the basis of the practice of other states, in increasing considerably her appropriations for higher educational institutions.

Another measure of the reasonableness of appropriations based upon current practice is that furnished by the taxable wealth of

TABLE 73.

DISTRIBUTION OF PER CAPITA DISTRIBUTION OF STATE MONEY (APPROPRIATION AND INCOME) GIVEN TO PUBLIC SCHOOLS, NORMAL SCHOOLS AND UNIVERSITIES AND COLLEGES COMBINED IN THE VARIOUS STATES OF THE UNION—1920.

Per Capita Amount	States
$ 0– .24	.....
.25– .49	1
.50– .74	1
.75– .99	2
1.00–1.24	4
1.25–1.49	5
1.50–1.74	9
1.75–1.99	2
2.00–2.24	3
2.25–2.49	1
2.50–2.74	2
2.75–2.97	3
3.00–3.24	2
3.25–3.49	1
3.50–3.74	3
3.75–3.97	1
4.00 and over	8
Total	48
Median	$2.00

the various states. Inasmuch as the latest data on this subject are those for the year 1913, it has been deemed best not to use them. A similar type of data is that furnished by the amount of income of the inhabitants of the various states. There has recently been made by the National Bureau of Economic Research a very careful study of the income of the wealth of the inhabitants of all the states during the year 1919. Table 74 brings into relationship the data furnished by this study and figures for the cost of schools

TABLE 74.

PERCENT OF STATE INCOME GIVEN TO VARIOUS TYPES OF SCHOOLS IN THE STATES OF THE UNION—1920.

States	Public Schools	Normal Schools	Colleges and Universities	Total
Alabama	.0052	.0002	.0005	.0059
Arizona	.0043	.0017	.0022	.0082
Arkansas	.0027	.....	.0004	.0031
California	.0031	.0004	.0009	.0044
Colorado	.0019	.0002	.0017	.0038
Connecticut	.0018	.0005	.0004	.0027
Delaware	.0032	.....	.0005	.0037
Florida	.0010	.....	.0009	.0019
Georgia	.0034	.0002	.0004	.0040
Idaho	.0025	.0007	.0018	.0050
Illinois	.0011	.0001	.0005	.0017
Indiana	.0025	.0002	.0008	.0035
Iowa	.0003	.....	.0016	.0019
Kansas	.0005	.0005	.0018	.0028
Kentucky	.0030	.0003	.0004	.0037
Louisiana	.0032	.0001	.0003	.0036
Maine	.0049	.0003	.0005	.0057
Maryland	.0020	.0001	.0003	.0024
Massachusetts	.0015	.0002	.0003	.0020
Michigan	.0027	.0003	.0012	.0042
Minnesota	.0043	.0004	.0021	.0068
Mississippi	.0032	.0001	.0012	.0045
Missouri	.0019	.0003	.0005	.0027
Montana	.0040	.0003	.0028	.0071
Nebraska	.0011	.0003	.0017	.0031
Nevada	.0055	.....	.0037	.0092
New Hampshire	.0013	.0003	.0007	.0023
New Jersey	.0058	.0001	.0001	.0060
New Mexico	.0042	.0009	.0018	.0069
New York	.0014	.0001	.0002	.0017
North Carolina	.0034	.0002	.0008	.0045
North Dakota	.0042	.0014	.0017	.0073
Ohio	.0010	.0001	.0005	.0016
Oklahoma	.0013	.0004	.0015	.0032
Oregon	.0008	.0001	.0032	.0041
Pennsylvania*	.0019	.0001	.0001	.0021
Rhode Island	.0005	.0002	.0003	.0010
South Carolina	.0013	.0002	.0011	.0026
South Dakota	.0039	.0006	.0018	.0063
Tennessee	.0017	.0002	.0003	.0022
Texas	.0069	.0001	.0009	.0079
Utah	.0087	.....	.0048	.0135
Vermont	.0061	.0001	.0006	.0068
Virginia	.0043	.0002	.0007	.0052
Washington	.0034	.0006	.0017	.0057
West Virginia	.0011	.0006	.0008	.0025
Wisconsin	.0025	.0008	.0013	.0046
Wyoming	.0048	.....	.0013	.0061

*Data for 1921: Public Schools, .0022; Normal Schools, .0004; colleges and universities, .0004—Total .0030.

TABLE 75.

DISTRIBUTION BY STATES OF PERCENT OF STATE INCOME GIVEN TO VARIOUS TYPES OF SCHOOLS IN 48 STATES—1920.

Percent	Public Schools	Normal Schools*	Colleges and Universities	All Schools Combined
.0000–.0004	1	32	12	.....
.0005–.0009	3	8	15	.....
.0010–.0014	9	1	5	1
.0015–.0019	5	1	10	5
.0020–.0024	2	.....	2	5
.0025–.0029	5	.....	1	5
.0030–.0034	8	.....	1	3
.0035–.0039	1	.....	1	5
.0040–.0044	6	.....	.....	4
.0045–.0049	2	.....	1	3
.0050–.0054	1	.....	.....	2
.0055–.0059	2	.....	.....	3
.0060–.0064	1	.....	.....	3
.0065–.0069	1	.....	.....	3
.0070–.0074	.....	.....	.....	2
.0075–.0079	.....	.....	.....	1
.0080–.0084	.....	.....	.....	1
.0085–.0089	1	.....	.....	.....
.0090 and over	.....	.....	.....	2
Total	48	42	48	48
Medians	.0029	.00029	.0009	.0040

*Six states have no Normal Schools.

given in Table 70. Table 74 shows the percent of the total income that was expended by the states for each of the three main types of schools. In order that these data might be studied satisfactorily, distribution tables were made of each of the four columns contained in this table.

Table 75 contains a distribution of the figures presented in Table 74. In this form we are able to tell at a glance how the percentages for Pennsylvania compare with those of the other states. The median percentages are given at the bottom of the respective columns. These medians should be read as follows: In the year 1920, two-tenths of one percent of the income of the inhabitants of Pennsylvania was expended for the support of public schools, one hundredth of one percent for normal schools, three hundredths of one percent for colleges and universities, and twenty-four hundredths of one percent for the three classes of schools combined. A measure of the same expenditures for the year 1921 would be better suited to our purpose. Accordingly, similar percentages for Pennsylvania have been arrived at in the same way by using one-half of the appropriations for the biennium 1921-23. They are as follows: public schools .0022, normal

schools .0004, higher education .0004, all schools .0030. This rather crude measure indicates that in all classes of schools and in all schools combined, Pennsylvania is not expending so great a proportion of its annual income as is the median state.

The entire chapter furnishes conclusive proof that, in any possible scheme for retrenchment in expenditures of the state, in order to make expenses come within revenues, there are no appropriations in excess of the norm as determined by the practice of other states, except possibly in the case of normal schools, the appropriation for which was necessarily unusually large this biennium in order to pay off indebtedness. It would seem, therefore, that reduction in this field of appropriations should not be made, at least until other appropriations shall have been brought down to the same level. Whether it should be done at this time is a serious question, the answer to which is dependent in large part upon the importance placed upon education as regards the other concerns of the state. It is believed that no other field of governmental activity can be placed ahead of education. The fact that Pennsylvania has lagged behind the other states in this particular during the past decade or two is adequate reason for its being placed in a favorable position in the consideration of the budget. While in case of extreme necessity it might properly share in the cutting down of appropriations, great care should be taken to make the reduction as small as possible.